APPLE CHAT

Vol 3 No 1

EDUCATION

AppleChat

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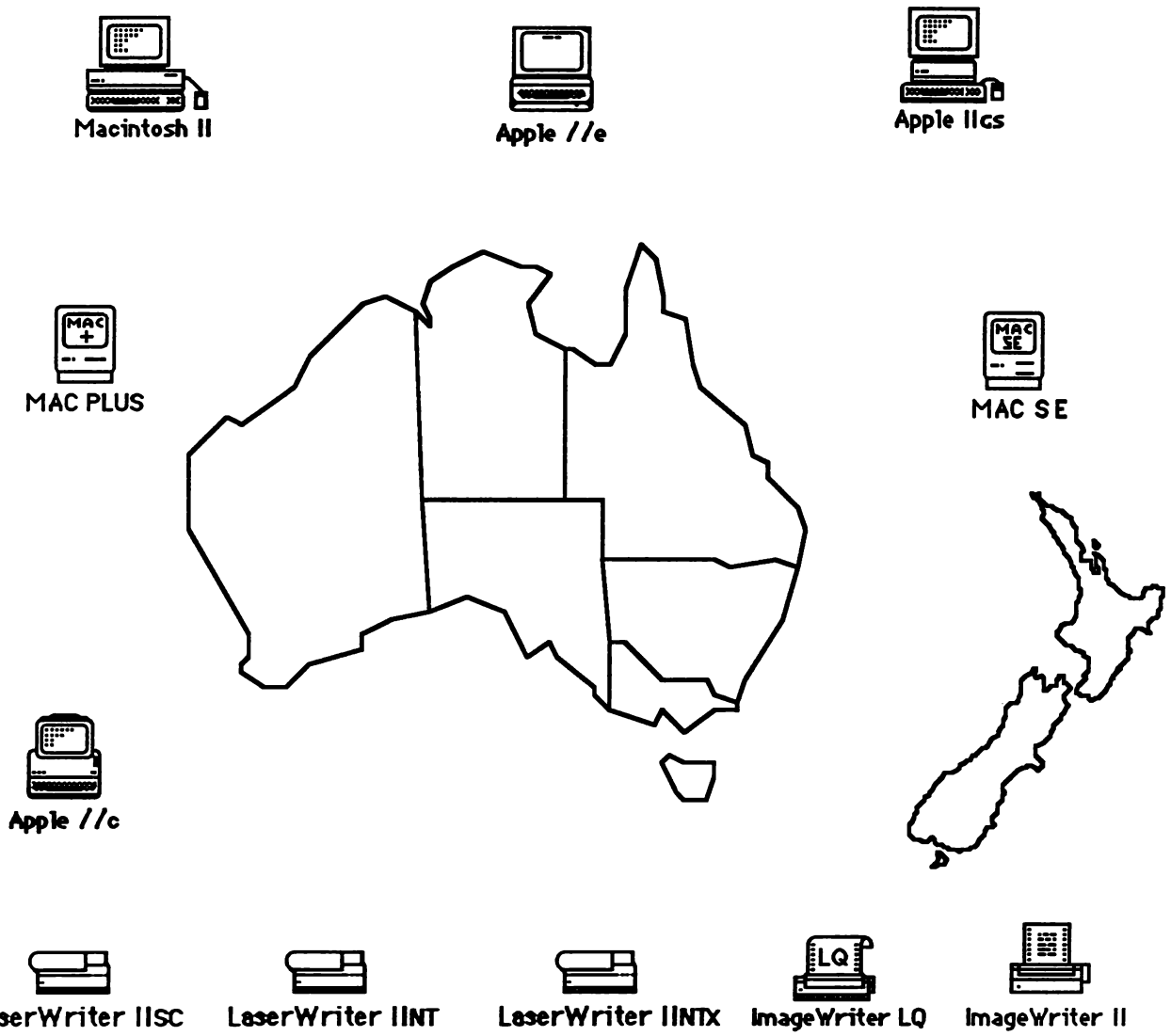


A potpourri of items

Prepared by Conrad Silvester

Education

Editorial

This edition of AppleChat has some new departures from previous editions. Firstly, I am learning a DeskTop Publishing Program and using it to layout this magazine. AppleChat will now have modern refinements, like page numbers, and a Table of Contents! I can see a small smile of satisfaction at a successfull prodding appearing on a particular person's face. She must have thought the task hopeless!

AppleChat is now settling into a format and needs just one more feature, feedback, so if you have a letter you wish to write, please do so and I will try to include it in the magazine.

Apple has released a large number of new products during 1986 and 1987 and 1988 will become a year of filling the gaps, things like the Midi Interface,. Mac WorkStation and a new range of printers.

This brings me to another topic, namely upgrades, Macintosh applications are more and more assuming 1 megabyte, as a consequence Apple is offering upgrades for existing machines of smaller RAM capacity. This program is not endless however and consideration should be given to upgrading soon. Likewise if you have any 64K Apple IIe's then upgrade them NOW! The best value for money here would be a basic IIGS upgrade as you get lots of other things besides more memory.

I hope to visit as many as possible of my readers during 1988 and wish you all the best during this year.
Conrad Silvester.
Apple Computer Australia

Table of Contents

What's happening

Peter Lynden and Mark Simon have joined private industry, accepting a position with Computer Cellar and Seahorse Computers respectively, we wish them both well.

Bryn Dolan has accepted a position as Computer consultant on the Sunshine Coast. I understand he is amenable to requests from Southern Staters for Inservice (at their expense) in his location.

Ralph Czerniejewski of Alice Springs is running a World Reading conference in Alice Springs during March April of 1988, please give this a plug in your region as Ralph has put a lot of work into it.

National Computer Education Conference 1988 is at Observation City in Perth. This is a good event, in order to participate and see Perth, pearl of the West, so start thinking up imaginative submissions now!

Alan House (of Bushrangers fame) is working on something verry interesting, well worth a look when he finishes.

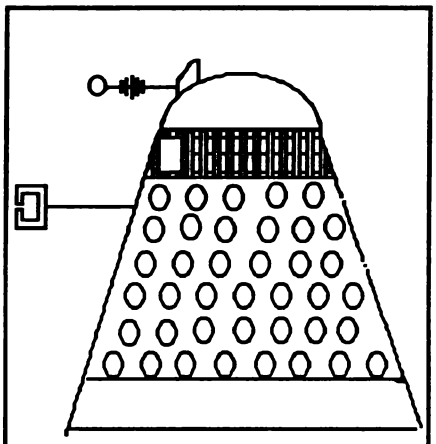
Apple Education has a team member on board, John O'Neill a systems UNIX man he can answer some of those esoteric questions you may have.

Bill Hartley and Adele Habib are back in MISD for 1988.

Vale Bob Huggett who has returned to the coalface for 1988, we wish him well and are sure we will see him again.
Jean Krystyn has left CDC to undertake executive training.

Tricia Berman is taking over Jean's responsibilities. Don Shingles has returned to Queensland in order to pursue his former interests (something about missing the Gold Coast and sunny weather was said too).

Anyone in NSW who is interested in a top show for schools showing how you can combine computers and music appreciation through rock and roll and a darn good show should try and catch up with Bill Nielsen. Bill



By Amber Rickard - Age 9.

has a touring show and will go most places on adequate notice (needs time to get Kunnunurra District School Steve maybe next year).

Rob Walker is producing a similar newsletter to Errol Chopping's for the Riverina region entitled Screen Gems. Please write to Rob at the Ritz (Riverina Region Information Technology Centre) if you would like to be included on the mailing list. (If things get too large he may want a contribution towards costs of the magazine.)

Keith Duffy has accepted a position as principal leaving Yannos to run the shop at McKay St, we wish Yannos luck as with cutbacks and everything else he will have more hats to wear than Susan Renouf has had husbands!

Errol Chopping is doing something with HyperCard a little bird tells me.

Shane Wharton has accepted the position of Editor of Information Transfer.
I saw him less than one month later and there were at least seven more grey hairs!!!

Tricia and Anastasia are using a novel method of office organisation, they remain where they physically lived during 1987 but use electronic means to communicate in their new roles (both now work for CDC). I hear the FAX and Keylink will get a real workout in 1988.

Bruce McCarthy is still supporting Collingwood, while Graeme Inchley is convinced that 88 is the year the Bombers' start to fulfill their promise. The Impossible Dream is a good song, Graeme.

Val and Maureen from South Perth have finally recovered from the National Conference, they claim the South Australian wines were stronger than they expected!

Education

Apple's Network -- an overview

AppleTalk

AppleTalk is the overall architecture (the software concept) by which Apple Macintosh and Apple IIGS computers share information. A workgroup is a group of people working together with computer/s.

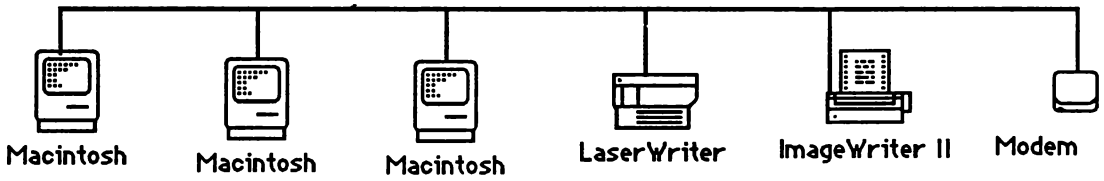
LocalTalk

LocalTalk is the physical means by which information is shared within a workgroup eg this connector and cable.

A LocalTalk Connector

Shared Devices

Within each workgroup, you can share devices, like printers and send messages to and fro using LocalTalk connectors. This gives you the basis for the next step.

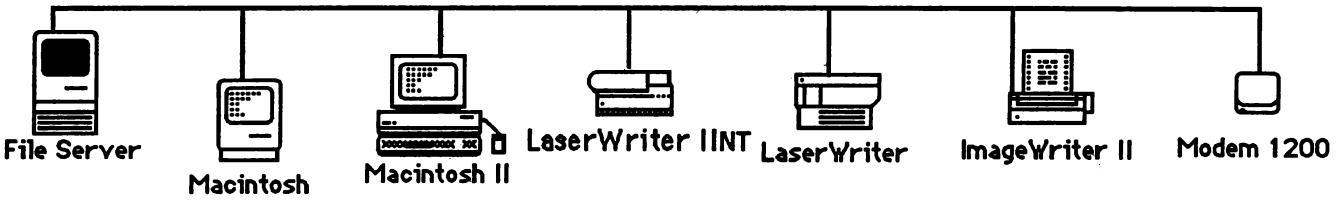


Education

Apple's Network -- an overview

File Server

A File server is a means by which all computers connected together can share programs and exchange information. Apple's File serving software, called AppleShare, requires a Macintosh with a Hard Disk.



Zone

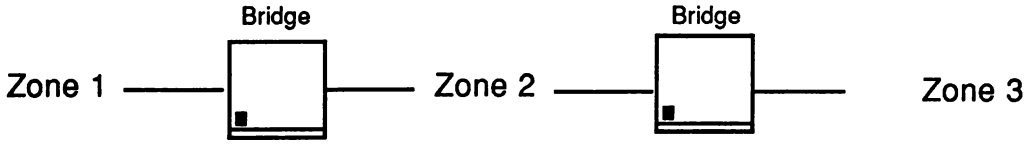
When you establish more than one workgroup then each workgroup is called a zone. Zones can be linked together in a number of ways.

Education

Apple's Network -- an overview

Bridge

In order to connect two or more zones together you require a bridge. This is usually a piece of hardware. AppleShare then allows you the same ability to share programs, files and data between zones.

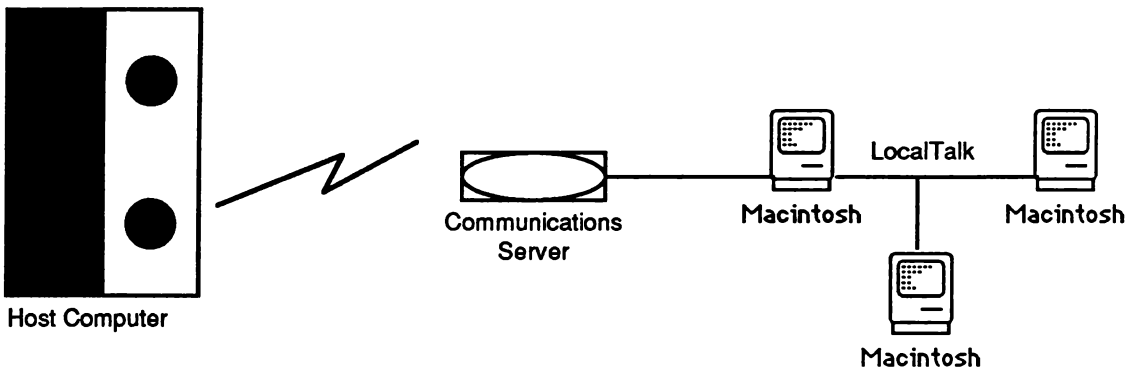


Remote Connection

To connect two zones via a telephone you need a bridge and a modem at each zone.

Big Systems Connection

The Communications Server allows connection to a Mainframe or mini computer. Some features of the Bridge may be provided, depending upon the capabilities of the Host Computer.



Education

Netcomm Aust. Pty Ltd -
Communications and connectivity software.

Netcomm Australia Pty Ltd have been involved with communications for quite some time and have steadily grown in both range of products and expertise in the communications field. Netcomm are an example of Australian high tech company that have been successful in exporting therir products to many countries throughout the world. What follows is a list and short description of the range of Apple compatible products manufactured and sold by Netcomm. It is interesting to note that they have produced software & hardware combinations that allow connection of Apple II and Macintosh products to larger systems. As can be seen from this range there is a large number of communications programs available for use with the Apple range of computers from Netcomm and able to operated on Apple modems.

Apple Async 2

This package enables your Apple][+, IIe or IIc to communicate with ASCII text data services such as bulletin boards and databases. You can transfer files using the XMODEM protocol. The program supports both the Apple and Netcomm modem products and has an order number of **SWA2.** It is priced at $55.86.

Apple Videotex II

This software package will enable your Apple][+, IIe or IIc to communicate with Videotex services such as Viatel. It provides a monochrome display of Videotex graphics with convenient log-on facilities. The program supports both the Apple and Netcomm modems and has an order number of **SWV2.** The price is $55.86.

IBM 2780/3780

This software package allows you to use your Apple][,][+ or IIe to access a host computer system that supports IBM 2780/3780 bisynchronous protocols. You need an Apple Communications Protocol card to be able to use this software. The Order number is **SW93.**

Async + Protocol Card

This package combines the Async 2 software package for the Apple][+ and IIe with an Apple Communications Protocol card for those users who do not have a suitable serial port on their Apple. The Order number is **NC301** and the price is $112.86.

IBM 3270 BISYNC

This software package allows you to use your Apple][,][+ or IIe computer to emulate the capabilities of an IBM 3278 terminal plus a 3271 or 3274/3276 control unit for access to IBM host computers. You need an Apple Communications Protocol Card to be able to use this software. The Order number is **SW94.**

The NETCOMM PROGRAM for APPLE IIGS.

This software package will enable your Apple IIGS to communicate with a wide variety of remote data services. The program supports ASCII mode for accessing bulletin boards and databases as well as a Videotex mode for access services such as Viatel. A super high resolution mode available on the Apple IIGS. The program also supports file transfer using XMODEM when in ASCII mode and using Teleloading when in Videotex mode. The program supports both Apple and Netcomm modems except the Netcomm modem 3 + 12. An upgrade (order no **SW316**) is available for owners of Videotex II or Async 2 programs for the Apple II. The Order number for this product is **SW62** and the price is $114.00. A similar program is available for the Apple IIe with an order number of **SW64.**

MACVIDEOTEX

Mac Videotex as the name implies allows you to connect your Mac (any Mac 512K or higher) to access Videotex services such as Viatel. Colour printing of the Viatel frames to the ImageWriter II is supported. The program will operate with both Apple and Netcomm modems. The Order number is **SW91** and the price is 114.00. An upgrade to version 2 is available for registered users of the earlier version of Mac Videotex. The upgrade order number is **SW915.**

Computers in School Administration

The term "School Administration" conjures up a wide variety of visions. The breadth and depth of the vision depends on the school size, whether it is from the perspective of the teacher, principal or Minister of Education and the level of School Administration required.

When I have marked them, then I have got to.....

The definition for this paper of the "Use of Computers in School Administration" includes all computer applications that are not directly related to the use of computers with students in the classroom situation.

This includes student and staff details, mark storage, mark standardisation, timetabling, storage of absentees, library applications, transfer of information to and from the Department of Education mainframes and a multitude of other operational tasks which may come up in a school environment.

Grrr. Another return due yesterday!!!!

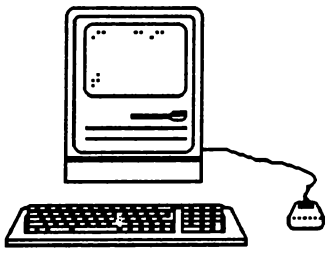
The tasks may be divided into three broad categories based on the people involved:

(i) Class Administration

Those tasks relating to helping the teacher in the administration of their classroom. This includes the storage of student details, marks, attendance, production of tests, notes and other publishing tasks.

(ii) School Administration

The tasks performed by the school include the storage of student and teacher details, reports cards, letters to parents, library function, newsletters, yearbooks, timetabling, attendance records, and the preparation of reports for the Department of Education. The software required to facilitate these tasks includes, word processing, publishing, spreadsheet and complex data base applications.



An Apple Macintosh SE

(iii) Departmental Administration

The Departmental tasks include the collection and manipulation of data to provide statistical information, publication of reports and a variety of other tasks related to efficient and timely use of resources.

Apple //e

The Apple IIe - an Administrators workhorse, often using AppleWorks.

Apple IIcs

The Apple IIGS, an ergonomic replacement for the Apple IIe.

At this time, there are schools across Australia using Apple computers, be they Apple II or Macintosh in each of these categories. Historically the Apple II became the most popular microcomputer for these applications as there were already a large number of these in schools.

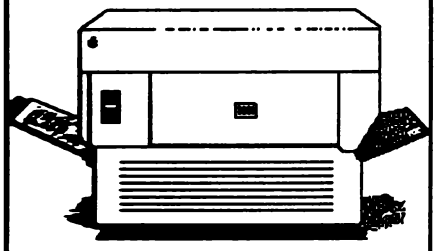
Education

In the last two years, the Macintosh has become increasingly popular due to the power of the hardware, software and its ease of use. The common interface used by all Macintosh software, has been shown to reduce the time taken and cost of training operators.

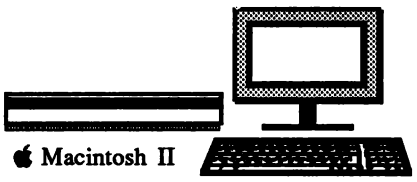
(i) Class Administration

Applications for classroom administration revolve mainly about the storage and manipulation of marks for assessment, positioning and examinations and the production of print or transparency materials for use within the classroom.

The Apple II is used extensively for the first of these tasks. A variety of programs have been developed in Australia to meet specific state needs. They include Motorised Markbook (N.S.W. Department of Education), Mark Aid (Victorian Department of Education), Markbook (Mark Gainford) and MarkBook V5.1 (John Messing) to mention a few.



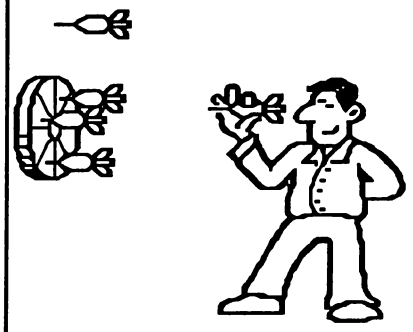
Apple's LaserWriter Plus printer, a high quality, quiet, efficient printer that can effortlessly combine the text and graphics produced by the Macintosh and Apple IIGS computers.



The Apple Macintosh II - a color Macintosh with the ability to use MSDOS, Unix and is four times as fast as the Macintosh SE.

Each of these is a solution developed especially for the storage and manipulation of marks. As well many schools have used the spreadsheet and data base facilities of AppleWorks to store their marks and for many other administrative tasks.

The second major application of classroom administration is the production of print materials and transparencies for use in the classroom. This may include development of test and examination papers, assignments sheets, notes and transparencies for use in the classroom or for in-service activities.



Prior to computers a variety of systems for scaling marks existed using manual methods.

The Apple II has over the last six years been used by many schools for these tasks. Teachers found they were able to store a bank of test or examination questions on disk and produce tests much more rapidly. With such a facility available teachers can develop tests and examinations on the same content without repetition of questions.

The bank of questions can be expanded over the years or shared with other teachers thus consolidating the task, and in the longer term, providing better resources with less time and effort for all.

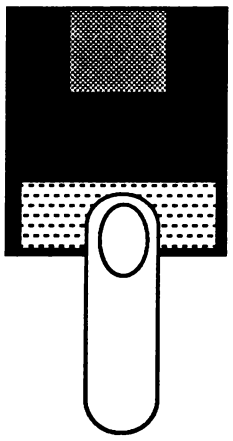
Two dot matrix printers supplied by Apple, both of which can be used by any Apple II or Macintosh computers.

Although graphics, mathematical and scientific characters and foreign language characters can be supported by the Apple II, it was the introduction of the Macintosh in 1984 that provided the combined text and graphics interface allowing these applications to be more readily supported.

Education

Over the last three years many schools across Australia have purchased at least one Macintosh and some schools many more. Often the Macintosh has been purchased to meet a variety of Administration needs.

The LaserWriter has proven a cost effective addition to the school to provide high quality output. The ImageWriter II offers high quality dot matrix output from all Apple systems. The recent introduction of the ImageWriter LQ has provided additional speed and quality to dot matrix printing and a wider carriage for relatively low cost.

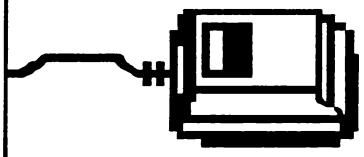


A 3.5 inch disk - This type of disk has proved increasingly popular in schools due to its relatively more robust design and capacity to store large amounts of data.

The Macintosh environment allows teachers to easily incorporate special characters, which are important in Mathematics, Science and Foreign Languages. This has proven a boon in the production of classroom materials. The characters were most often added by hand after the materials had been developed. This often led to omissions and errors causing student distress and confusion in examination situations.

Other subject areas require the inclusion of graphics in their materials. The combined text and graphics environment of the Macintosh has proven to be an important easy to use tool for these requirements. Subject areas where this has been most important include Science, Mathematics, Industrial Arts and Social Science.

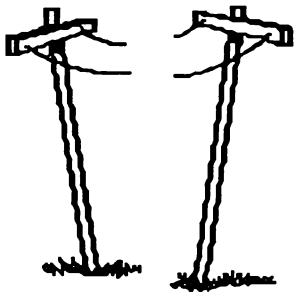
A third feature of the Macintosh environment is the ready integration of the various software applications and the common user interface. This has allowed teachers to incorporate graphs and data (from spreadsheets) within their materials to aid in teaching and analysis. Applications of this type are important in Economics, Commerce, Mathematics and Science.



The Mouse - A device pioneered by Apple as a means by which people can manage and use a computer without learning complex, psuedo English-type 'commands'.

(ii) School Administration

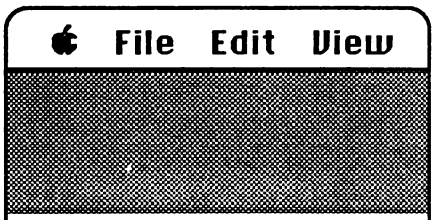
A wide variety of uses have been made of microcomputers in school administration. These applications include storage of student and teacher details, the production of newsletters, letters, reports and yearbooks, accounting, managing the functions of the library, recording sports' day results and timetabling.



Lack of communications can have disastrous results for a school. Schools with Macintosh equipment can feel secure in the knowledge that the skills required to replace absent staff using the computer are quickly and easily acquired.

Almost as soon as the first computers were purchased by schools, they began to be used to help lighten the school's administrative load. This type of usage expanded rapidly during the early 1980's but was, in the main, fragmented in its approach.

Several Apple II applications were developed to aid schools. Those focussed on the storage or student details, marks and report cards included "The School Administration System" (John Messing) and the EASIER system.



All Apple Macintosh programs are designed to appear consistent to the user. eg All Macintosh programs have an in the left hand corner, then the File menu and the Edit menu next to the File menu.

Education

Library packages including the Lothlorien Library System and Prolib were centred about the Apple II. Many school's across Australia have installed these systems and found the investment time saving and effective. The use of bar codes and bar code readers further facilitate library operation. Students may readily obtain information on materials held within the library and use this to help their research.

Network Interface

The Apple IIe and many other computers require a special card to be installed in the computer to enable them to transfer information to and fro. The Apple IIGS and Macintosh however have this facility built-in so schools considering multiple machines can inexpensively link them together in order to share expensive items like printers and send messages to and fro. Schools wishing for more sophisticated networking facilities can later install a software/ hardware solution called AppleShare. Another less expensive solution for small numbers of Macintosh computers is called MacServe.

Other programs help in the production of the school's timetable. These include Tabletime, TimeTabler, TableFlex, Timetable Blocker, TimeTable Manager and TimeTable Management. These programs significantly reduce the principals' or vice principals' load and provide an invaluable aid in the more time consuming elements of the task.

Programs also allow the Swimming or Athletics carnival results to be stored quickly and efficiently (e.g. Sports Meeting) and house scores and top athletes or swimmers to be quickly identified.

Since the release of the Apple IIGS late in 1986, it has gained the reputation of being the "Power Apple II". With an ergonomically designed separated keyboard, a minimum of 512K of memory and a speed of nearly three times that of the Apple IIe it is not surprising that many schools have moved their Apple II operations onto the Apple IIGS.

After the release of the Macintosh and its subsequent upgrade to a more powerful models in 1985 and 1987, many schools have looked to the Macintosh for their Administrative needs. The first application installed was generally to meet their publication needs, such a letters, report cards or the school newsletter and yearbook. Schools impressed with the power and ease of use of the Macintosh found the Macintosh could also help in other Administrative applications.

The telephone is the most common means by which computers exchange information, both within Australia and across the world. A modem is a means by which computers send and recieve information through the telephone.

Four solutions have proven popular. The simplest of these is the use of Microsoft Works. Microsoft Works is an integrated productivity package together with the schools' administration template offers an entry level administration solution. For smaller schools and primary schools this package is reasonably priced and offers powerful capabilities.

For those schools with more ambitious needs, the Macintosh combined with Omnis 3+, 4th Dimension or MacSchool are more suitable. Omnis 3+ and 4th Dimension are relational data bases providing powerful data base capabilities.

Modem 1200

Apple supply modems suitable for use with all Apple computers. These modems are also supplied with software to allow schools to connect to popular information services such as Viatel and KeyLink. Netcomm, an Australian company, also supply modems suitable for use with Apple computers at very reasonable prices.

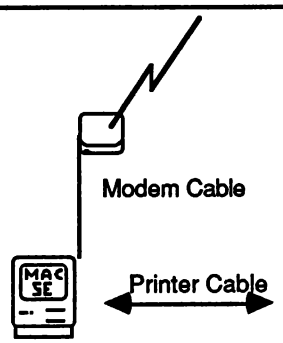
Several modules using Omnis 3+ are installed in schools across Australia and Blythe software the Australian distributor of Omnis 3+ can provide details of these installations. The most popular of these, in NSW is OmniBus and in Victoria, EdMin. 4th Dimension is a newly released relational data base for the Macintosh and at least one Administrative solution is under development.

Education

MacSchool is a total Administrative system for schools developed in Canada. The package may be purchased in individual modules or complete. It includes modules on student and teacher details, attendance, marks, reports, library and timetabling.

The timetabling package is the most complete microcomputer package available in this area. The algorithm for the timetabling was developed by a renowned expert in timetabling. The package takes full advantage of the Macintosh interface providing ease of use for even a novice. Administrators trialling and using this package have found it invaluable in reducing the work associated with administration.

In the last two years however the Departments of Education in almost every state have been assessing the breadth and depth of school needs in the Administration area. In some instances such as Northern Territory, South Australia and Tasmania, schools have been encouraged to link into the Departments mainframe from their schools. In other states a microcomputer solution is either under development or in the tender assessment phase.

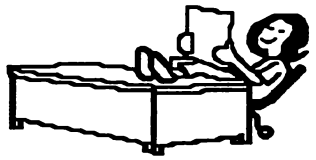


Mac School, Fourth Dimension, Omnis and MicroSoft Works all allow for the transmission of data from school Macintoshes to other computers located at central offices.

(iii) Departmental Administration

In each state across Australia the Department of Education uses a mini or main-frame computer for the storage of data concerning the staff and students in each school in the state. Access to this information is either using "dumb" terminals installed in the school or using a microcomputer which has the ability to link into the main-frame.

An example of this is the development of the ASCIS data base containing details for libraries



Well thought out and carefully implemented computerised administration solutions can considerably ease the load of school principals, deputies and head teachers throughout Australia.

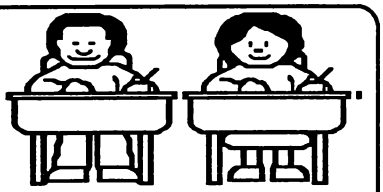
across Australia stored on a main frame in Victoria. Each Department of Education has at least one terminal allowing them to access this information. Schools have access to this information using a microcomputer, modem and appropriate software.

Within the Department itself or the Regional office the tasks include the collection and manipulation of data to provide statistical information and publication of reports. Often access time to the main-frame is limited as is the number of terminals available. By linking an Apple microcomputer into the main-frame, data can be down-loaded and manipulated using the power of the microcomputer off-line.

Children benefit from the clarity and high quality presentation of materials available with Macintosh and Apple IIGS computers. Administrators using these systems can confidently expect a consistent high quality output for their communications with parents.

Many Macintosh systems are installed within regional offices and Departments of Education for this purpose as the Macintosh may be readily linked to almost all types of mini and main frame computers.

But the Departments have also found that the publishing capabilities of the Macintosh have allowed reports, school correspondence, teaching materials and



Dreams

newsletters to be produced in-house. The production costs of such documents have proven to be low and there have also been saving in time as last minute adjustments may be made in-house.

Education

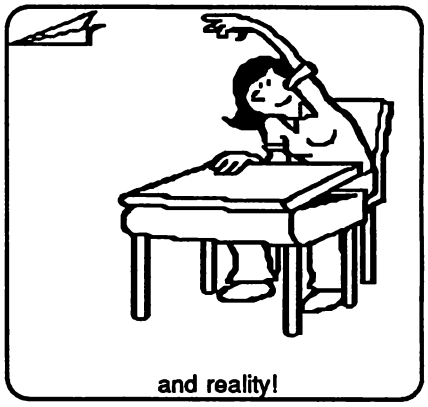
1988 and Beyond

There is no doubt as computers are used more widely in society, so also will computers be used more extensively to simplify the tasks of School Administration for the teacher, school and at the Departmental level.

More and more teachers, administrators and clerical staff will need to be able to enter information, access information and produce reports from the information stored within microcomputers

The training of this enormous body of people will be far more expensive than the purchase of the computer systems themselves. The Macintosh has been shown to be easier to learn and all applications follow the same guidelines, which means "that once you get the hang of one software package on the Macintosh you already have the gist of all others".

Macintosh solutions are easy to learn easy to use and yet the Macintosh is a powerful microcomputer with powerful software. Training and ongoing costs are significantly reduced because of this. For these reasons the Apple Macintosh family of products is the most popular microcomputer for school Administration.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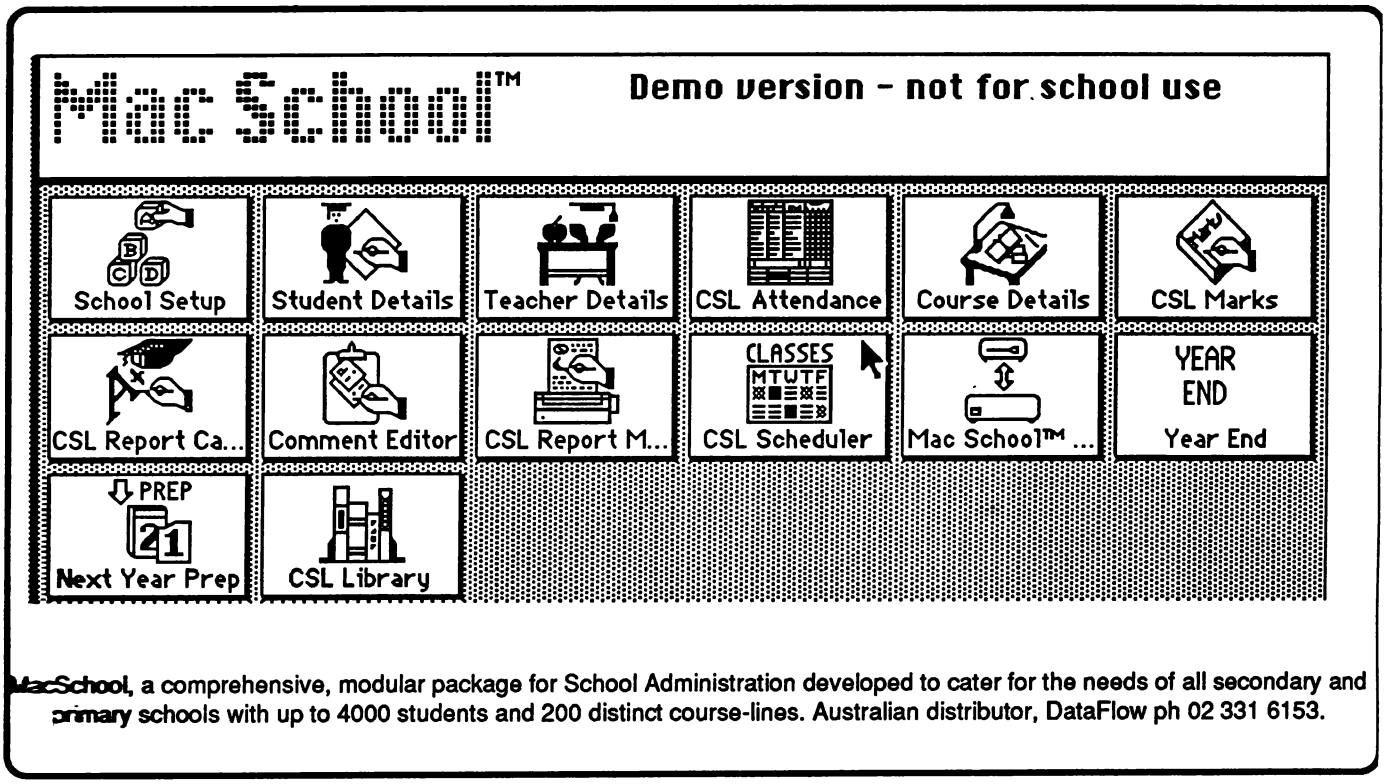


MacSchool, a comprehensive, modular package for School Administration developed to cater for the needs of all secondary and primary schools with up to 4000 students and 200 distinct course-lines. Australian distributor, DataFlow ph 02 331 6153.

Education

What's new from Apple.

Some new items that may interest educators considering the year's program in their region and schools.

Apple Midi Interface

The Apple Midi interface is a general interface for use with all Apple computers. It allows for in and out and can be attached to the serial port of the Apple computer required. Obviously the Apple IIGS and Macintosh will make good use of this interface with current software.

The cost is $126.00 for schools with a Super Serial card and adaptor cable required in addition to that for an Apple IIe or IIc.

For further details contact:
Your local Authorised Apple Education Reseller.

Apple LaserWriter II series

Apple have recently released a new range of LaserWriter printers which are best characterised as 'intelligent peripherals'. Options include: Face up or face down printing, sheetfeeding, envelope feeding, manual or auto feed printing, two sided printing with all models. The three models are designed to be upgradeable from one to the other. The top of the range, the Apple LaserWriter IINTX can have various additional options added to it to allow for differing needs.

Apple LaserWriter IISC

This printer is designed to be a personal LaserWriter upon which you can build up to the more advanced models if you need to do so. The printer uses the output of Quickdraw in order to produce a 300 dpi image upon paper. It comes with 1 Mbyte of RAM as standard and has two SCSI connectors plus a Apple Desktop Bus port available for connection of other devices. Elsewhere in AppleChat you will find a diagram showing the methods of connecting to these LaserWriters with whatever CPU you own. The Apple LaserWriter IISC for instance can be connected via SCSI to an Apple IIe, IIGS or Macintosh Plus, SE or II. The Apple Desktop Bus (ADB) port allows inclusion and connection of third party alternative input devices to the printer. Paper output can be either face up or face down and manual feed can be made. An envelope attachment, sheet feeder etc are available for the printer. Overall, a quiet high quality printer that will suit many schools and teachers with the added attraction that it can be upgraded at a later stage.

Apple LaserWriter IINT

This printer essentially replaces the Apple LaserWriter Plus. It has very similar specifications with the addition of features such as face up or face down printing and the ability to attach an envelope feeder. Postscript is inbuilt to this printer as emulation of the Diablo 630, ImageWriter II and LQ emulation is also available. There is an AppleTalk connection (RS 422) as well as the RS 232 connection for those remaining with this earlier standard. An Apple DeskTop Bus port is also supplied to allow for alternative input devices. It is designed to be upgradeable to the Apple LaserWriter IINTX and many people will opt for this printer as a classroom machine in the first instance knowing that they can upgrade to the more advanced features of the IINTX at a later stage.

Apple LaserWriter IINTX

The Apple LaserWriter IINTX is the top of the range for Apple's new LaserWriter printer range. It has all the abilities mentioned for the LaserWriter IINT plus a SCSI port connector. It will also emulate the HP LaserJet+ printer if desired. The Apple LaserWriter IINTX also allows expansion of up to 12 Mbytes, a font expansion card and a dedicated hard disk can be attached via the SCSI port. The printer is very powerful and would suit regional or head office needs where the ability to develop highly complex documents and print them efficiently and quietly is a required feature. Whilst not priced to suit the majority of classroom budgets it would be considered a cost effective alternative when set against the costs of printing a weekly magazine or newletter of say 1000 copies plus per week. Also those who are involved in regularly mailing information to a reasonable number of people may be attracted by all the features combined with the envelope attachment.

Overall a well designed set of printers to replace the current range of LaserWriter and LaserWriter Plus printers. Apple has increased the range of people who can enjoy the benfits of Laser printing by introducing the LaserWriter IISC whilst allowing

What's new from Apple - continued.

these people to upgrade to the more complex models as their needs grow and budget allows.

Contact:
Your local Apple Edn. Reseller.

Mac Work Station

A new product of interest to those who are desiring more than dumb terminal connectivity between Macintosh and larger systems. It is a set of remote programming protocols plus a Macintosh Application that allows mainframe computers (such as DEC or IBM) and personal computers acxting as hosts to communicate with the end user via a Macintosh desktop interface. No matter what operating system or mainfrmae you are using, MacWorkStation allows access to a consistent Macintosh interface.

As you use MacWorkStation, you will notice the following features.

MacWorkStation lets Macintosh developers use the Macintosh interface without having to program on the Macintosh. Using MacWorkStation, it is possible to develop a variety of applications on different hosts to provide a standard human interface on the Macintosh family of computers.

From a user's standpoint, MacWorkStation gives a human interface to information processing provided by the host computer.

Multi-user applications on the host computer let Macintosh users share common data, and, since application enhancements are performed on the host computer, Macintosh software doesn't have to be redistributed.

Host applications created with MacWorkStation can also offload printing, filing andtext editing to the Macintosh.

MacWorkStation allows applications running in different host environments and using different transport media, such as standard serial, AppleTalk, and Ethernet protocols, to use Macintosh printing and filing utilities.

For those interested in connectivity and the use of Macintosh as an intelligent terminal to a mainframe or mini this is a large step forward. Since it will cost somewhere in excess of $5000.00 for a licence to use the software, I cannot really see a queue developing, but I can see that quite a few large system developers may be interested in utilising this software.

Supplier: Your Local Apple Education Reseller

Apple II Software Distributed by Apple as of 11/30/87- Partial list

Application	Version
Apple Access II	1.2
Apple Presents Access II	1.1
The Apple IIc at Play	1.2
Inside Story	1.1
Intro to the Apple IIe	2.0
Inside Story IIe	2.0
Apple IIGS System Disk	2.0
ProDOS 16	1.1
ProDOS 8	1.4
Apple Tour - Apple IIGS	1.0
Apple Education Classics	1.0
Getting Down to BASIC IIe	1.0
ProDOS A/Soft Prog. Asst. (APA)	1.4
AppleWorks DS	2.0
Instant Pascal	1.5
MousePaint	1.2
System Utilities IIc & IIe	2.1.1

What's New for the Apple - Third Parties.

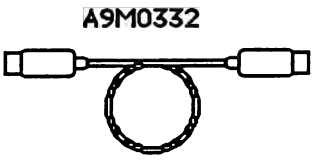
NDEC

NDEC stands for the Northern Districts Education Centre, a group of people based at Cheltenham in NSW who are involved in a wide range of activities associated with Computer Education and other curriculum areas. Apple is supporting NDEC in various ways during 1988 and recommends this place as a source of information for materials and resources of use in Computer Education.

NDEC ph 02 868 1533 is available during Office hours Mon to Friday and has, amongst other things, a large collection of public domain and low cost utilities and other programs suitable for

SCSI Peripheral Interface Cable

SCSI - A high speed parallel data exchange medium.

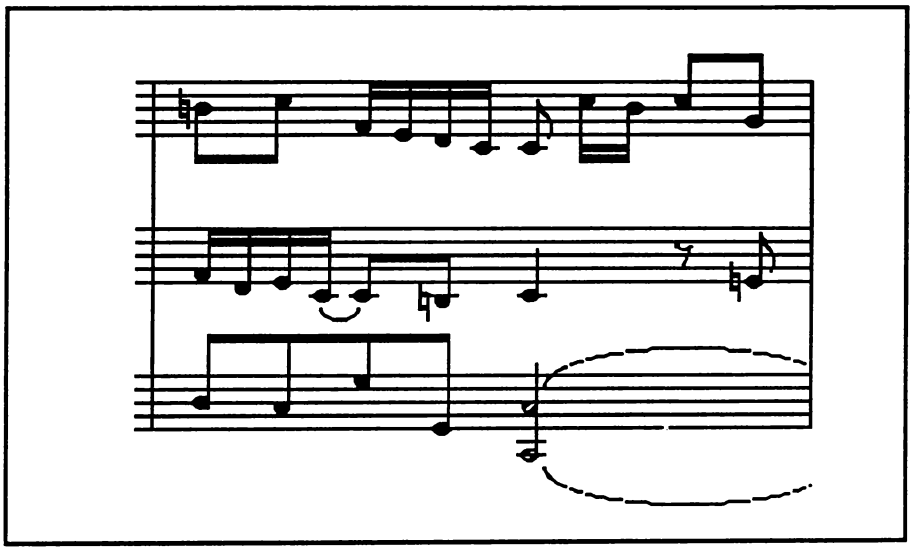


DeskTop Bus Cable

ADB standard for input devices.

Disclaimer:

All information contained in this section of AppleChat is as accurate as possible at the time of publication. Some third party software and hardware may no longer be available or may have changed distributor between the time of publication and distribution. If any inadvertent inaccuracies occur the author apologises for any problems that may result.



What's new - Apple II

Future Sound

This is a hardware/software package that allows conversion of analog input to digital sound in both mono or stereo or from a microphone (supplied). The sampling rate and duration can be varied and you are given details as to amount of memory used in acquiring that sample. Once the sound is input it can be reversed and operated upon in various ways. The package includes some basic instructions in how to manipulate sound allows for stereo or mono output. At present this would be of major interest to developers or those with an interest in electronic music.

Further details when a distributor is announced.

FrEdBase

FrEdBase is the second in the FrEd series customised by Greg Butler of Miller Computer Centre. It allows 18 categories in a database. Each category heading may be up to 40 characters in length. The maximum field length is measured from the end of a Category heading to the end of a line.

FrEdBase has two cursors. The dotted block cursor is an overstrike cursor while the underline cursor is an insert cursor. When using the insert cursor, Control-Y deletes to the end of line. When using FrEdBase menus you generally may use arrow keys, the spacebar or numbers. An equal sign (=)

What's New for the Apple:- Third Parties - continued.

may be used when saving or loading files to select the displayed filename. FrEdBase supports the use of ProDos pathnames.

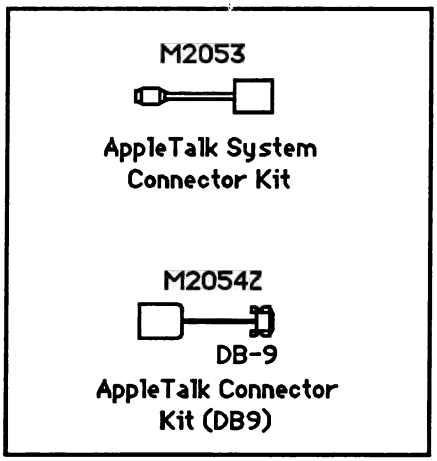
FrEdBase uses standard TXT type files, although it has it's own format. If you try to load any non FrEdBase TXT file you will be told that it is a corrupted data base file. Other TXT files appear in a catalog.

Work with a database option allows you to load existing data bases or empty data base layouts. If the file is empty, you are placed at the add a page option initially.

The report module allows you to select records to be included in reports, design report layouts, save or load these layouts and print to a printer, the screen or to a disk. You can save as many layouts as you can fit on a disk, and these may be applied to any file, providing it has sufficient categories. You may include up to 18 categories in record type (some call it labels) layout, or up to 8 columns (or 160 chars) in a list type layout. Columns may be totalled in a list layout. Options allow you to adjust the print.

The Create/Edit module allows you to design your FrEdBase pages. It is wise to consider number of categories and not use extras, as they take up data space. heading may be made up of Space characters (making them invisible), but these are marked with a colon: when Apple-Return is pressed.

The Import data option allows information to be imported from other data base programs, provided they can produce TXT type (ASCII) files. Your data will given category names 1,2,3,4,5 etc.



Contact your local education reseller or:
Greg Butler
Miller Computer Centre
Miller Public School
MILLER NSW 2168
AUSTRALIA

Ph (02) 331 6153

Keyboarding

Keyboarding was originally developed by yours truly, in conjunction with two others, Colin Woodley and Michael Bishop in 1984 to run on Apple IIe 64k machines. It is described in the Apple Education directory as published by the Logic Shop. Mark Gainford (of Mark's Markbook) undertook to revise the program in order for it run under ProDOS and on the IIGS in a 3.5 version. The program was designed according to the principles enunciated in the booklet "Keyboard Skills" and has proven popular in many schools. It is public domain and will be supplied to the NSWCEG in master form for them to distribute. If any other State Computer Education Groups would like a master copy please contact the NSWCEG on 02 8681533 and ask for Mr Jim Rennie. The disk also contains a copy of Mark's Markbook, some public domain games, a copy of FreeWriter as well as FrEDWriter, a range of AppleWorks Templates for use in school administration and a couple of useful public domain teaching tools. The program recognises whether it is running on an Apple IIe or IIGS and sets the control panel to monochrome. The program also incorporates the mouse as an aid to select lessons etc so that intending learners do not need to look down to select their lessons.

For further information Contact:
NSWCEG
C/- NDEC
cnr Beecroft Rd and The Promenade
Cheltenham NSW
Ph 02 868 1533

First Shapes

An interesting program for use with the Apple IIGS and Kindergarten and early primary students. Students can click on a shape and the program will enunciate the word to them. The shapes size and etc can be varied. Whilst simple in concept the program allows itself to be used in a variety of teaching situations including one to one, small group or larger group situations. As an aid in this formative stage it is

What's New for the Apple:- Third Parties - continued.

worth consideration.

Contact:

Your local Education Reseller or Imagineering.

DGI Organisation Ver. 4

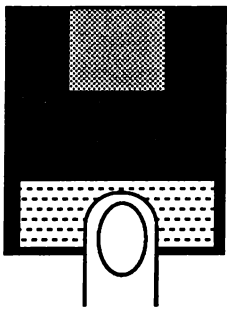
Decision Graphics Inc have released in the US version 4.0 of a program which allows you to create, modify, store, and retrieve organisation charts. When an organisation change occurs, the user retrieves the chart, makes the updates and the new chart is completed in a matter of minutes. The chart will support up to 58 individuals, 2 title lines and a footnote for each chart. For more complex organisations separate charts can be created for each district or department. The user can control the number of lines of text for each individual, justification (left or center) and placing a box around the individual or not.

Price US$49.95

Early birds can contact:
Decision Graphics Inc.
PO Box 2776
Littleton, CO80161
USA
Ph 0011 1 303 796-0341.

SuperSonic Stereo Card

This is a stereo card which produces stereo output for any software that addresses stereo through the Ensonic chip. Connect Supersonic to your hi-fi stereo, headphones, amplified speakers etc. The card works



3.5 Disks, the way to go!

very well with the Bose Roomates and is immediately able to be used with Music Studio. The cost is Retail ex tax $145.00 and considerably enhances the sound output from the Apple IIGS. Owners of this system will be pleasantly surprised at the added quality of sound produced by this card when attached to the Apple IIGS.

Contact:
Your local Education Reseller or Imagineering.

SuperSonic Digitiser

This is an add-on to the Stereo card described above. It plugs directly into the stereo card expansion connector. You can use provided software to edit and manipulate sound waveforms produced by the Digitiser. It is expected to be available by November of this year.

Contact:
Your local Education Reseller or Imagineering

Writer's Choice Elite

A word processor for the Apple IIGS. Mouse controlled, ruler displays etc MacWrite like WP system. You can have different coloured text and up to 16 windows on screen at the same time. You can integrate this with GSPaint to allow cut and paste of text and graphics. The program is now available and allows you to cut and paste from compatible programs such as Paintworks Plus and Draw Plus. A full featured word processor which allows windows, mouse usage, colour etc.

Contact:
Your local Education Reseller or Imagineering.

TimeOut series

Time Out series are a set of program accessories for AppleWorks which adds functionality to the basic Apple IIe 128K machine. The accesories available are Calculator, Calendar, Casre Converter, Clock, Data Convertoer, Dialer, Envelope Address, FileMaster, Graph, Macro Compiler, Macro Options, Note Pad, Page preview, Puzzle, QuickSpell, SideSpread, SuperFonts, Utilities and Word Count. The programs are all published by beagle bros which means that (1) they are not protected (2) they are well designed and fit in with AppleWorks. If you use an Apple II with AppleWorks then these programs are a must consider!!

Contact: Your local Education Reseller or Imagineering

What's New for the Apple:- Third Parties - continued.

PrintShop

IIGS version of this very popular Apple IIe program which takes advantage of the features of the IIGS and offers full mouse control, higher screen resolution and multi coloured graphics not available on the Apple IIe version. Just the thing for a new owner of an Apple IIGS to use in the classroom or at home as it will very quickly produce a sign letterhead, banner etc. The price is $96.00 ex tax.

Contact:

Your local Education Reseller or Imagineering.

Calendar Crafter

The first MECC programme for the Apple IIGS. It is a program that allows you to use calendars to keep track of events such as birthdays, holidays, sporting activities etc. It provides a quick and easy way to create and print custom calendars. It offers you the ability to create calendar styles and sizes to suit your needs and to decorate your calendars with pictures and a variety of letter fonts and sizes. It will print to either an ImageWriter or LaserWriter printer. The price is US$59.95.

Early birds could contact:
MECC
3490 Lexington Ave North
Saint Paul
MN 55126-8097,
USA
ph 0011 1 612 4821-3500.

16 Bit MSBasic for IIGS

AC/BASIC, a 16 bit basic compiler for the Apple IIGS. Absoft the author of the MicroSoft BASIC compiler for the Macintosh maintain that with few exceptions, AC/BASIC provides enhanced support for the GS's advanced graphics and color capabilities through a complete set of color and windowing commands. Using them, BASIC developers can quickly create commercial applications without having to understand the intricacies of the Apple IIGS toolbox. Additionally, AC/BASIC gives programmers full access to the Apple IIGS synthesiser chip - by designing the sound statement from the ground up, Absoft maintains that beginners can create custom sound and music very easily, while at the same time allowing experieinced users to produce sound synthesiser type sequencing and complex instrumentation effects. For the first time, Apple II programmers will be able to take advantage of Apple's user friendly windowing environment without having to resort to assembly language.

AC/BASIC works on all Apple IIGS computers with at least 512k bytes and one disk drive. It is not copy-protected and comes with an extensive user reference manual. Although a license is required, there is no fee for redistributing applications created using AC/BASIC. AC/BASIC is currently in Beta test at this stage and is due for release by mid 88.

Early birds could contact:
Absoft Corporation
2781 Bond St.
Auburn Hills
MI 48057
USA
Ph (313) 853-0050

Weeee!!! Hyper DA has arrived!

Geologic Simulations

Two new programs from Sunburst called Geological History and Geologists at Work, both simulation science programs where students play the role of a budding geologist and gain an understanding of geological changes that have taken million of years to occur.

In Geological History students can design a cross section of a land mass and then simulate an earthquake to see how it displaces millions of years of rock layers. In Geologists at work, students would create a land mass that would have evolved over several million years. The they chart a geological map of its surface. In both programs, students can save their designs for other students to investigate, or they can interpret a problem generated by the Apple.

What's New for the Apple:- Third Parties - continued.

Through this process, students call upon important problem-solving skills such as using a model and working backwards (in what sequence did a land mass evolve?), predicting and projecting (what will happen to sa didsposition of a rock after a reverse fault?), and analysing (what does a 30 degree tilt of the earth's surface suggest about geological history?) The price is US$65.00.

Contact:
Your local EducationReseller or EdSoft. ph 02 766881

Picture Manager

Place single or double high res pictures into Multiscribe 2.0 (or higher) with this new online accessory. Let's you bring your creations right into your Multiscribe documents without exiting Multiscribe!

The program is compatible with most major grsaphics programs such as Dazzle draw or MousePaint. Pictures can be moved, modified etc with the Font Editor if desired.

Contact your Local Education Reseller.

Graphics Tourer (*Australian program)

Shann Kellaway decided that the problem people were having with graphics on the Apple IIe and IIGS was that they couldn't move them easily into a desktop publishing program like GraphicWriter. So he has written one, called Graphics Tourer it allows the movement of graphics from Print Shop, Dazzle Draw, GSPaint, Newsroom etc etc into a form suitable for use within Graphic Writer as clip art. This program has been acclaimed by a few people I know who have been involved with Apples from the very early days and is well worth adding to your library of utilities.

Interested people could contact:
Your local Education reseller or Techflow
ph 063 551988

Showoff

Showoff is a progam for quickly creating visual aids. The output includes overhead transparencies, 16 color printed sheets and IIGS 'interactive' slide shows. The program includes over 380 graphics, 140 borders, and a variety of type styles and sizes; in addition, a built-in graphics editor and design tools allow users to create original graphics.

Showoff can be used as an interactive teaching tool as well by virtue of the interactive slide show feature and so provides a secondary function for the program.
Price: A$99.00.
Contact your local Apple Education reseller or Imagineering

Designasaurus

This is a new three part educational/creative program for dinosaur information. Packaged in both 5.25 and 3.5 formats it includes activities such as:

Walk a dinosaur - you walk the dinosaur through the three ages of dinosaurs, paying attention to variables such as food, the environment, enemies and more; a certificate is awarded upon completing a successful walk.

Build a dinosaur - Select various body components from 'real' dinosaurs to build your own fantastic beast - then name it and print it in nay of three sizes - 8.5 x 11, 11 x 17 or 17 x 22. This section also provides detailed information on each anatomical section and generates a description of the newly 'discovered' reptile as well as a critique of how well or poorly this creature would have fared in real life.

Print a dinosaur lets you print anyone of twelve different dinosaurs in 8.5 x 11 or 11 x 17 or 17 x 22 sizes. There is also suppliked some special paper which allows you to make iron on T-shirt transfers.
US Price $39.95.

Early birds could contact:
Designware
185 Berry St
San Francisco CA 94107
Ph 0011 1 (415) 546-1866

Data Display

MECC have obtained the rights to produce a data display device for the Apple II series that allows you to project clear 80 column text and graphics from your computer onto a wall or screen. It uses a transparent module that sits on top of any overhead projector. It is designed with the latest 'chip on glass' technology, eliminating the traditional circuit board found on many projection devices. All electrical circuitry is bonded directly onto the display

module, giving this system superior strength and reliability. A built-in fan and infra red heat shield control control the heat generally associated with overhead projectors.
I understand that IMAGINEERING have also obtained the rights to distribute a similar device.
Early birds could contact:
MECC
3490 Lexington Ave.North,
Saint Paul, MN 55126-8097
Ph (800) 228-3504

A.P.P.L.E. Co-op

Occasionally people ask me where to get further information and a general Apple specific magazine where there is the opportunity to obtain reduced cost software and hardware. The usual reply I make is to recommend they join the A.P.P.L.E. Co-op. They then ask me for the address and being my usual organised slef I haven't got it. So for all those who want to join a large Co-op which deals exclusively with Apple computers and third party software and hardware for those computers here is the full mailing address of A.P.P.L.E. Co-op.

A.P.P.L.E. Co-op
290 S.W. 43rd St.
Renton, WA 98055
UNITED STATES

Contact your local Education Reseller or local Apple user group for further details.

Open Apple

Heavily into programming or hacking an Apple II? Then this magazine is a must. Produced by Tom Weishaar, it is packed full of Apple II lore, humour, tips, advice, letters and solutions to your problems. As stated earlier this magazine is for those who have a fair idea of what I am talking about when I mention Call -151 and 3D0G. If these phrases are meaning full to you (or you would like them to be meaningful to you) then Open Apple is worth subscribing to.

Contact:
Open-Apple
P.O. Box 6331,
Syracuse,
NY 13217
United States

Printrix

An enhancement available for font-type printing of your AppleWorks files. It also supports files from AppleWriter, Word Perfect, Word Juggler, and plain old ProDOS ASCII files from just about anywhere. The basic concept is the same as SuperFont, except that Printrix is a post processor. You save your document complete with embedded commands to control print formatting, then run Printrix to produce your printout. In the case of Printrix, carat symbols precede format commands. For those interested the January 1988 issue of Call A.P.P.L.E. shows some of the possible output from Printrix. The book is priced at US$1.95.

Early birds could contact:
Data Transforms,
616 Washington,
Denver CO 80203
United States

Apple IIGS Buyer's Guide

The premiere edition of this guide has just been published. It contains a variety of interesting articles concerning the IIGS and reviews of over 125 IIGS specific programs that have been released. Included is an article describing the various educational software available for the IIGS, including First Shapes (mentioned above) and a number of others including some new MECC software. Also mentioned is "Softswitch" a switcher type utility for the IIGS which allows you to have a number of ProDos8 programs up and running at the same time. There is still problems with IIGS specific programs however any program that uses ProDOS8 and allows access to the Control Panel will work. All in all a guide worth consideration. Subscription rates are currently US$40.00 per year.

Early birds could contact:

Redgate Communications Corporation
660 Beachland Blvde
Vero Beach
Fla 32963
Ph 305-231-6904

Code for turning off color on IIGS from Basic.

```
1POKE 49232,0:POKE 49239,0:POKE 49164,0:POKE 49246,0: X% = PEEK(49193)

2 IF (64*(X%/64))-(32*(X%/32))=0THEN POKE 49193, (X%-32)

3 POKE 49185,128
```

What's New for the Apple:- Third Parties - continued.

Macintosh Section.

Mac School

This system was announced and previewed in late 1986. It has been trialled in a number of schools in Australia since that time. The program has been steadily revised and upgraded during the trialling process and input from our schools has formed part of the revision process. Training various authorised Apple Education Resellers in this system in order to offer the system's modules to schools with adequate support is under way as I write. These trials are proving to be quite successful and as the system matures school administrators are becoming pleased with this system. A comprehensive, purpose built system of data management using the Macintosh environment for school adminstration. The environment includes marks, attendance, library management, record cards and report generation and a scheduling module which will considerably reduce the hack work associated with a timetable generation and is able to resolve conflicts within the timetable process. Version 1.3 of the scheduler can build a Master timetable on a Macintosh II in about one hour, and place the students into that timetable in about 15 minutes.
I understand that there will be demonstrations as to the latest version, which has been significantly upgraded since its initial release, during March and April of this year in most States of Australia. If you wish to come and see the latest version of this package contact DataFlow or your local Education Reseller.

For further information contact:

Your local dealer or:

Dataflow
134 Barcom Ave
Rushcutter's Bay
NSW
Ph (02) 331 6153

run5

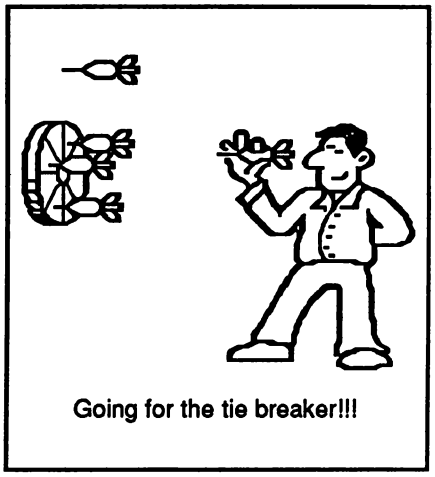
run5 is a magazine produced by the Strategic Studies Group which was formed by Ian Trout and Roger Keating. Roger used to teach mathematics back in the 1970's and has since successfully produced a number of war game type disk simulations for the Apple II and C-64 in conjunction with Ian Trout. This company, wholly Australian owned, has steadily grown and is now exporting 90% of its products to the US and Canada. I mention them for two reasons, firstly they have decided to expand their range of product offerings to include the Apple Macintosh and IIGS and secondly because the games they produce are very historically accurate and so may confidently be used within a History syllabus. The supporting documentation is also well researched and accurate. Roger, as an ex-teacher, insists upon this accuracy. They produce a quarterly magazine, called run5, which can be subscribed to by writing to Ian Trout at the address below. A magazine only subscription costs A$15.00, magazine and disk Apple II costs A$65.00.

If you are interested contact:

Ian Trout
run5
P.O.Box 261
Drummoyne
NSW 2047
ph 02-819-7199

Personal Writer 15

I haven't seen it but according to the source I heard it from this product allows you to handwrite on piece of paper and it will then translate that into typewriiten putput on the Macintosh screen. The package consists of a digitiser, an electronic pen, and character recognition software that the company claims is totally transparent to and compatible with all software running on the Macintosh. There is also a built in 100,000 word dictionary for correcting spelling mistakes. Personal Writer's character recognition software learns the characteristics of your handwriting when you first use the device - writing unconnected letters. You teach it variations in your writing style as they occur and at any



Going for the tie breaker!!!

What's New for the Apple:- Third Parties - continued.

time review the system's memory to add or delete letter shapes. To use the application you will need a Macintosh Plus, SE or II and for intensive use a hard disk and 2 megabytes of memory is required.

Early birds could contact:
Anatex Inc
1801 Avenue of the Stars
Suite 507
Los Angeles CA 90067

Ph 213-556-1628

DaynaFile

This is a floppy disk drive that fits onto the SCSI port on your Macintosh plus, SE or II. Using nothing but Macintosh applications you can read from or write to MSDOS formatted disks. DaynaFile is available in both single and dual drive configurations, in any combination of 360 Kbyte or 1.2 Mbyte 5.25" disk drives, 720Kbyte or 1.44 Mbyte 3.5 disk drives.

Dayna claim that DaynaFile fully supports Macintosh Finder applications, so your Macintosh manages the DaynaFile drives just as if they were Macintosh drives. DOS disks appear as disk icons thast can be selected, dragged, and opened as if they were Macintosh disks. Subdirectories on the DOS disk also become Mac folders. For even greater compatibility, the company offers Dayna data file translation software that allows you to access certain MS-DOS files from the Macintosh without losing formatting attributes.

Contact: Your local education reseller or:

Symbiotic Inc
ph 03 836 4482

QuickShare

Having gone out and bought that clone and discovered that you really wanted a Macintosh instead but can't afford to go hard disk Mac straight away, you may want to look at this option. Quickshare is a card designed to plug into a DOS box and use the box's hard disk like an external SCSI hard disk on a Macintosh. Once connected the Macintosh will boot directly from the hard disk and access them like they were the Macintosh's own. There is also provided a method by which data can be transferred from from any PC-based program to the Macintosh, including a pop-up utility to aid transfer of programs that do not have an export of data files or graphics facility inbuilt. US price quoted was US$465.00.
Early birds could contact:

Compatible Systems Corp
P.O. Drawer 17220
Boulder CO

Ph 303 444- 9532

Jam Session

A new product from Broderbund which is quite unique. it combines the ability to enter and record music with the ability to have an animated playback with people dressed appropriately playing the appropriate instrument. It is nothing like I have ever seen before and well worth taking the time to have a look at your local reseller's. Quite extraordinary, cost has not been finalised yet but should be quite competitive.

Contact: Your local Reseller or Imagineering.

Hyper DA

Keep the best till last, this program is a little gem which a friend managed to acquire at MacWorld in January. As the name implies it is desk accessory Hypercard which allows you to browse, use thre clipboard and print cards whilst you asre in another application or direct from the Finder. It is a little beauty and will become a standard accessory for Macintosh owners in my opinion. Even better from a teaching point of view it provides a means by which you can instantly have student's bvrowse through material and access (with the clipboard) material whilst engaged in another task. Even better it will work on a 512K Macintosh, so stacks develoed for educational purposes can be used via this DA on 512K/800 Macintosh machines. **Definitely the most useful piece of stackware I have seen so far.**

Where do you get it?

Your local reseller or InfoMagic.

Apple IIGS

Parts of the system

Analog RGB Screen

RGB stands for Red, Green and Blue, Analog means that the colour signal is sent as a wave form rather than as on off signals.

Mouse

The Mouse is a small electro-mechanical device that is used to point to required actions and instruct the computer to execute these instructions.

CPU

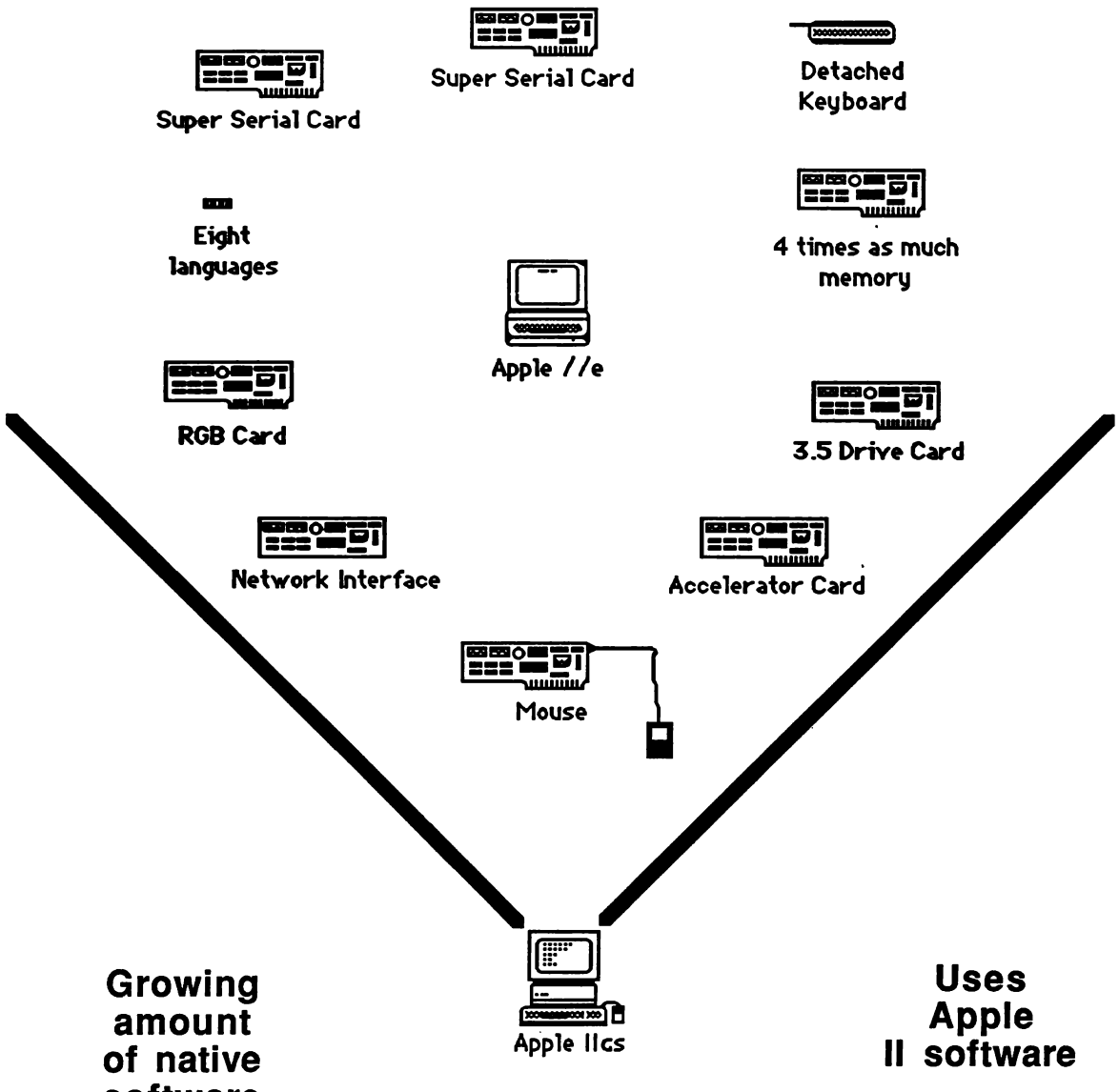
CPU stands for Central Processing Unit, the heart of a microcomputer system. The Central Processing Unit of the Apple IIGS the 65C816 is special in that it has two modes almost like two hearts.

Keyboard

The keyboard is the main means of data entry. In some older computers the keyboard was also the only way to give instructions to the computer.

Education

A Pictorial Comparison



Growing amount of native software

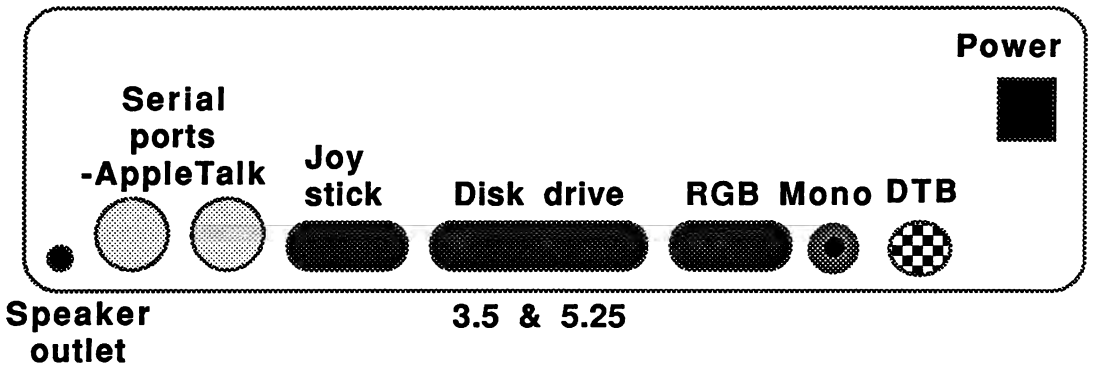
Uses Apple II software

15 voice sound

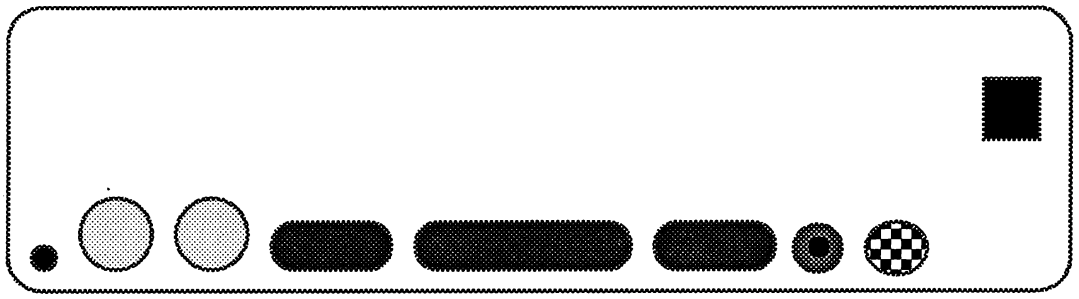
"The Apple IIGS"

Education

Apple IIGS

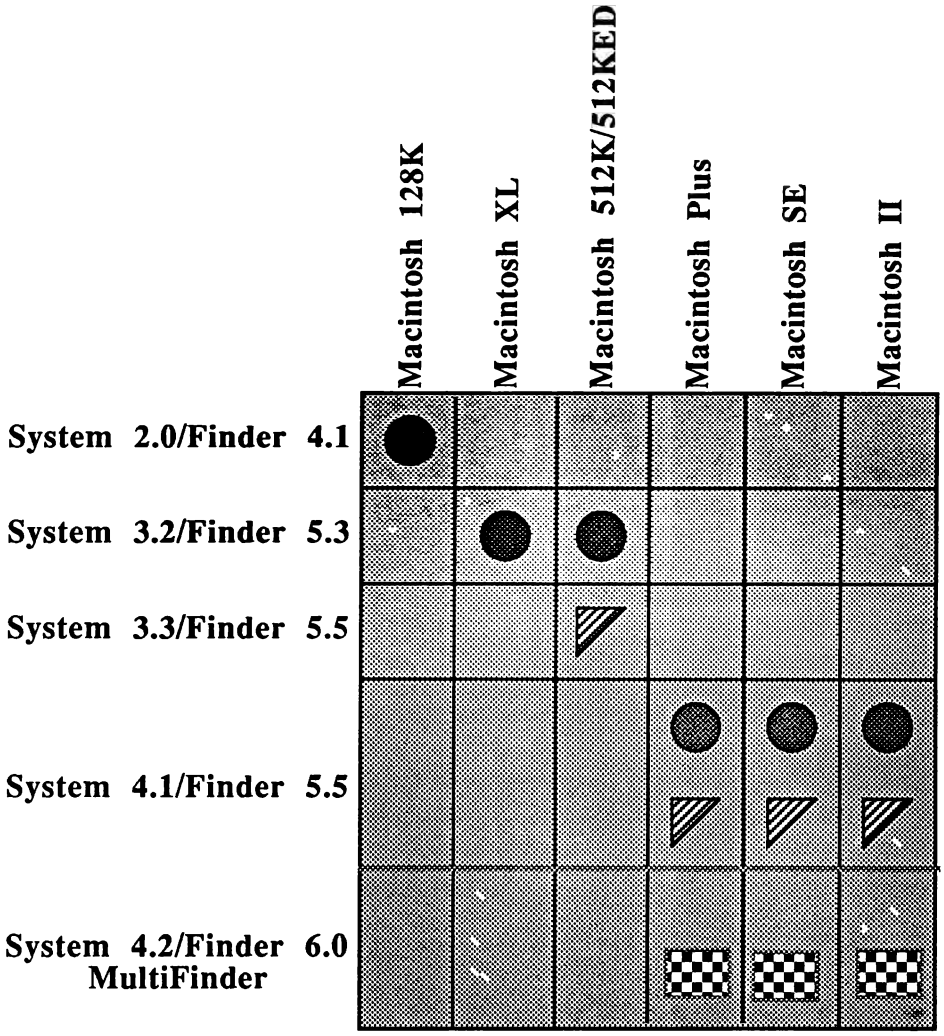


Back panel



Education

Apple System & Finder Versions Recommended Combinations



Best System Software for the Hardware

Best System Software with AppleShare

Requires 2 Mbytes of memory for effective use.

Education

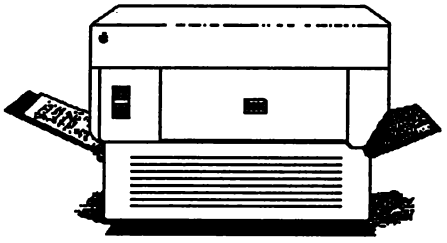
LaserWriter Printer

PostScript

PostScript is a special computer programming language designed for use in printing of computer generated graphics and text.

Master Copy

A master copy is a piece of work which a typesetter can use in preparing to make a 'run' of copies of your work.



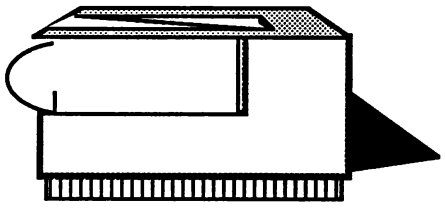
CPU

The Central Processing Unit of the LaserWriter (68000) has one purpose to process information under the control of PostScript.

Photocopy engine

The bottom of the LaserWriter is similar to a photocopier and uses the same principle to transfer your work onto paper.

The new LaserWriter II Series.

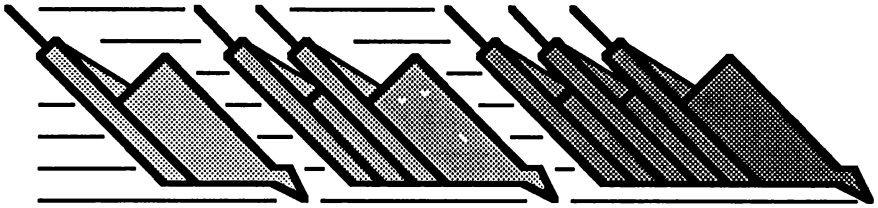


Same Basic Principles

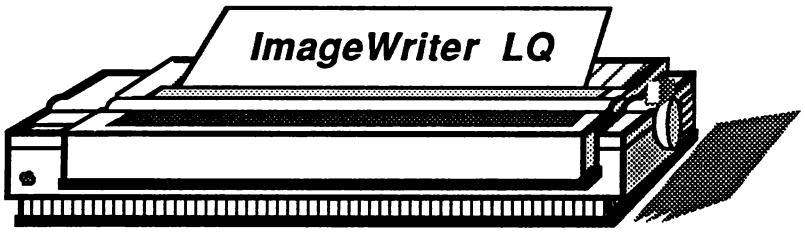
Education

ImageWriter Printers

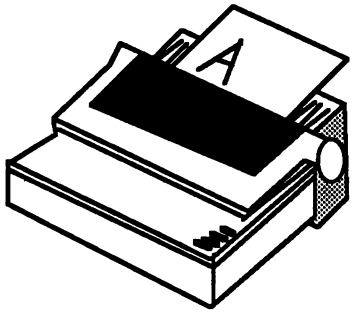
Bin Feeders

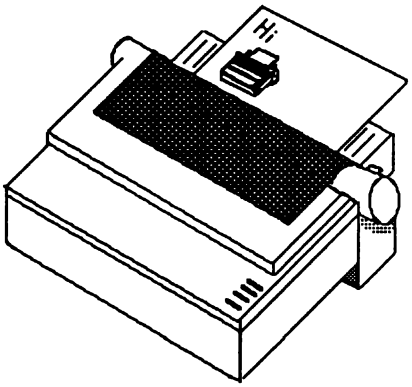


ImageWriter LQ

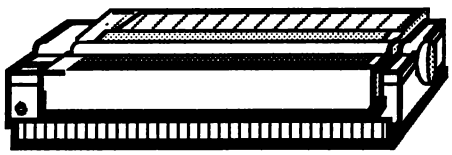


ImageWriter II



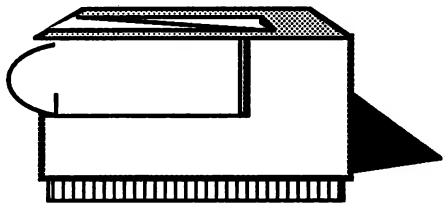


ImageWriter I

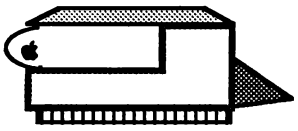


Education

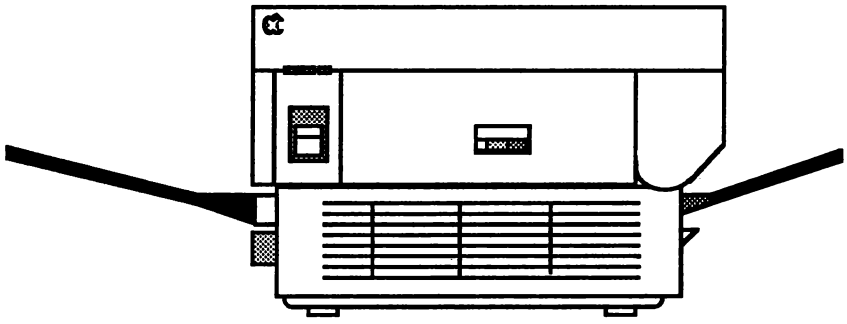
LaserWriter Printers



LaserWriter II



LaserWriter Plus

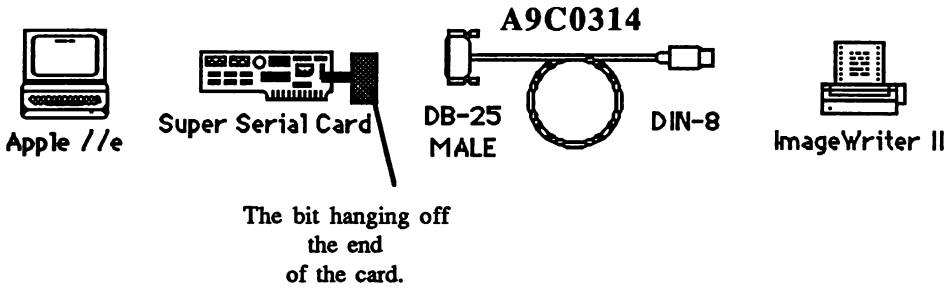


Education

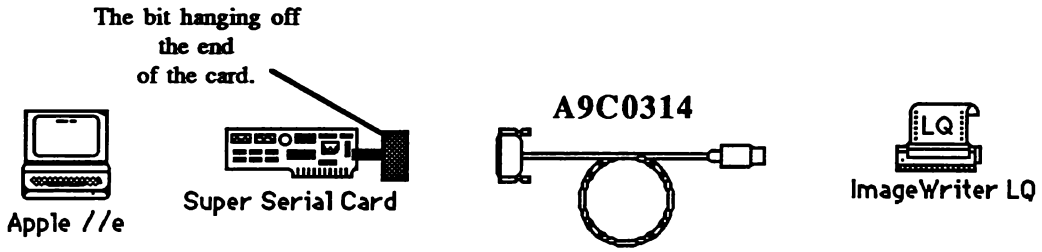
Cables for Apple IIe equipment commonly used (and confused)

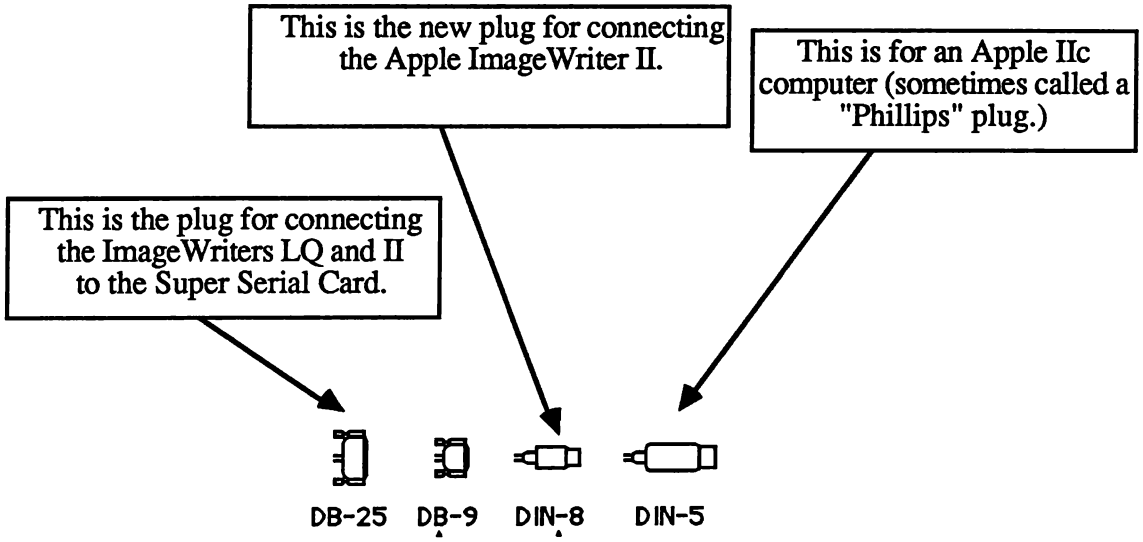
Platinum coloured cables.

A diagram of the complete system needed to connect an Apple IIe to an ImageWriter II printer.



A diagram of the complete system needed to connect an Apple IIe to an ImageWriter LQ printer.





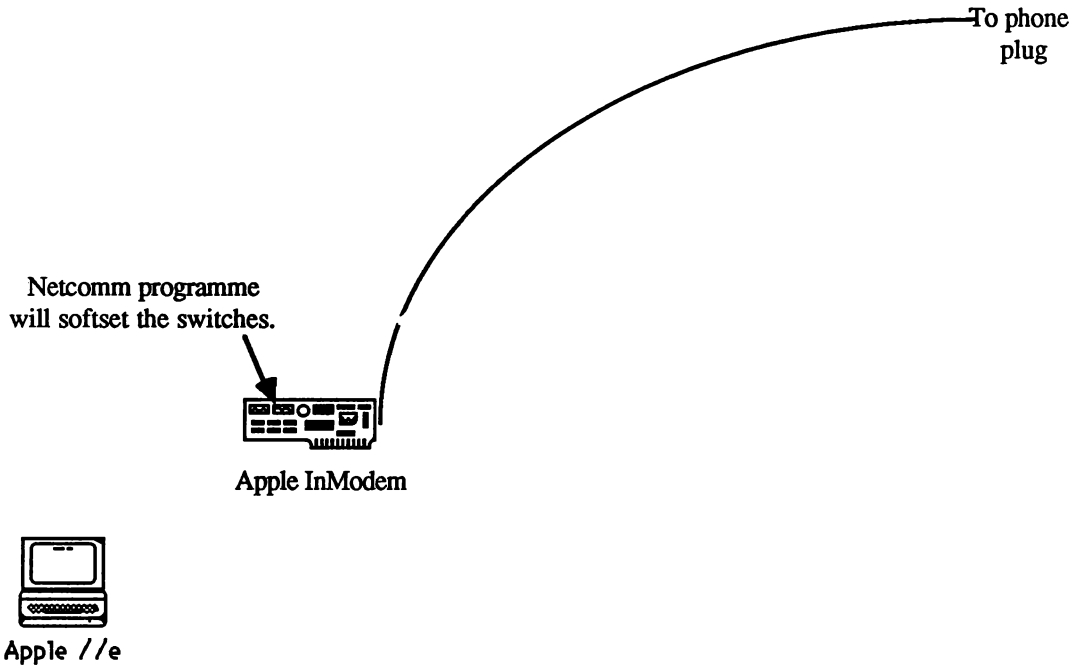
Education

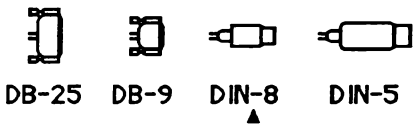
Cables for Apple IIe equipment commonly used (and confused)

Platinum series

A diagram of the complete system needed to connect an Apple IIe to an Apple InModem for 1200 or 300 baud usage.
(eg Telememo)

Simply install the card in slot two, software does the rest.





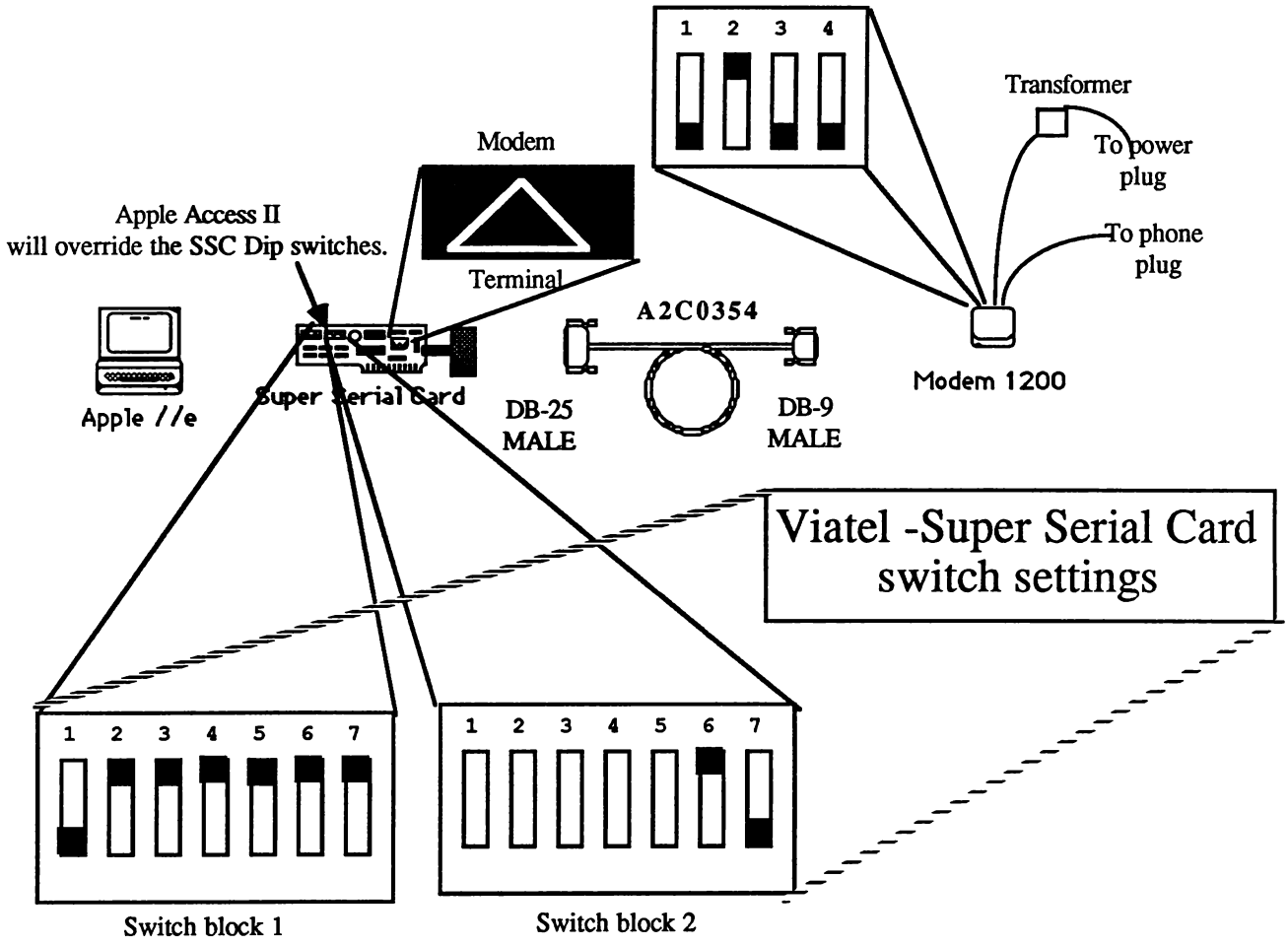
Page 33 (overleaf) shows how to connect to Viatel.

Education

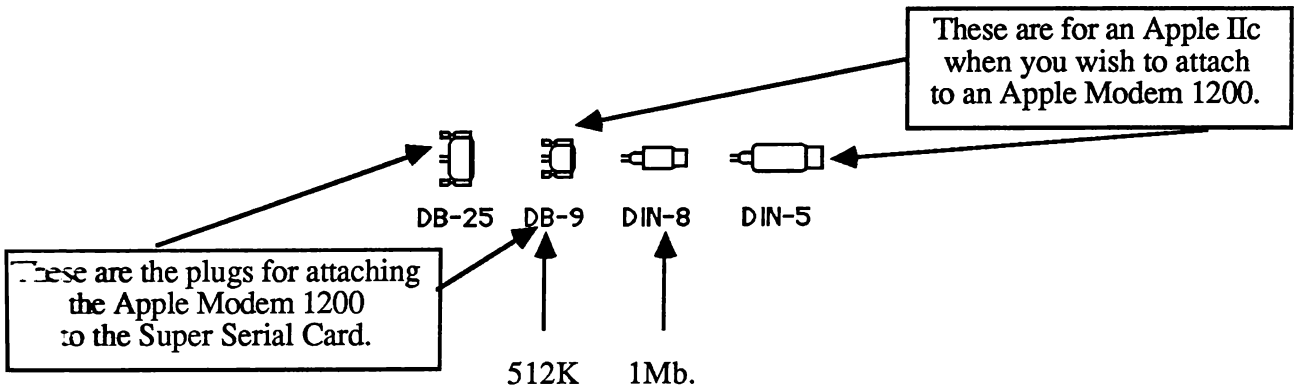
Cables for Apple IIe equipment commonly used (and confused)

Platinum series

A diagram of the complete system needed to connect an Apple IIe
to an Apple Modem 1200 for 1200 or 300 baud usage.
(eg Telememo)



NB Videotex II sets SW2-1 to SW2-5 from software.



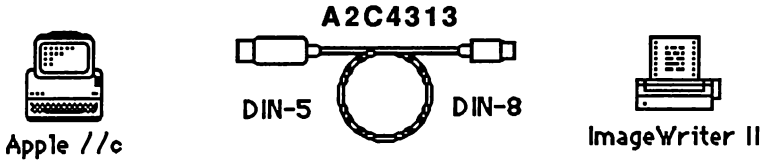
These two are used by the Macintosh series.

Education

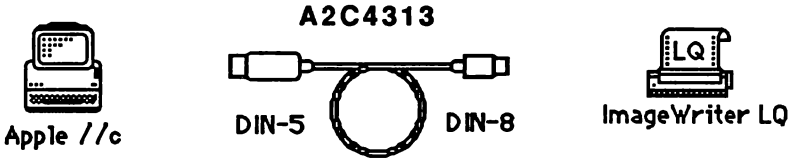
Cables for Apple IIc equipment commonly used (and confused)

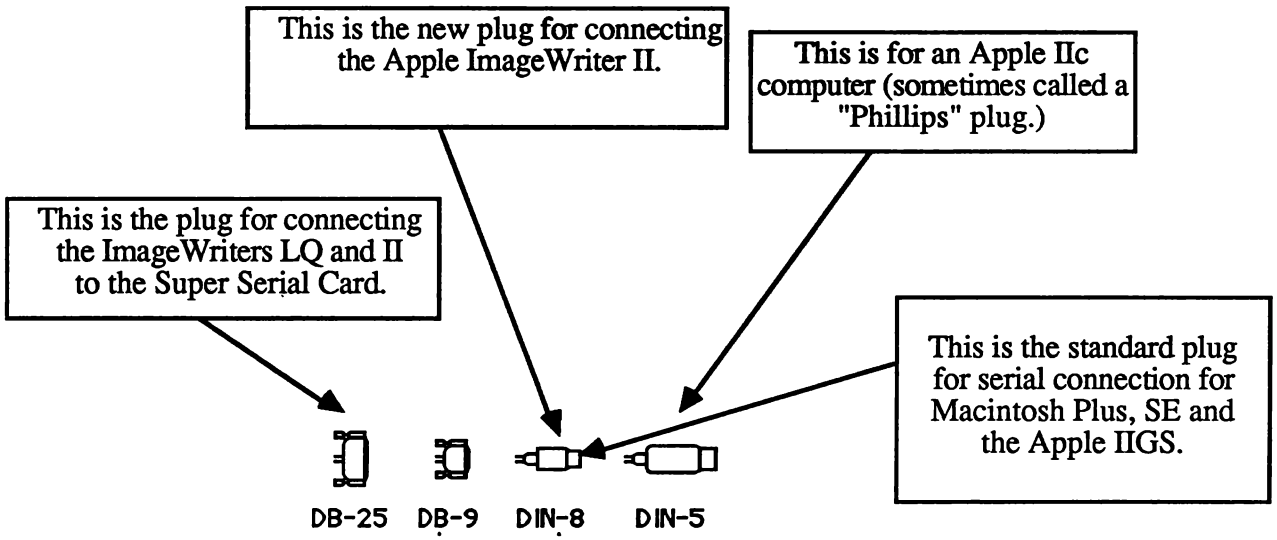
Platinum series

A diagram of the complete system needed to connect an Apple IIc to an ImageWriter II printer.



A diagram of the complete system needed to connect an Apple IIc to an ImageWriter LQ printer.

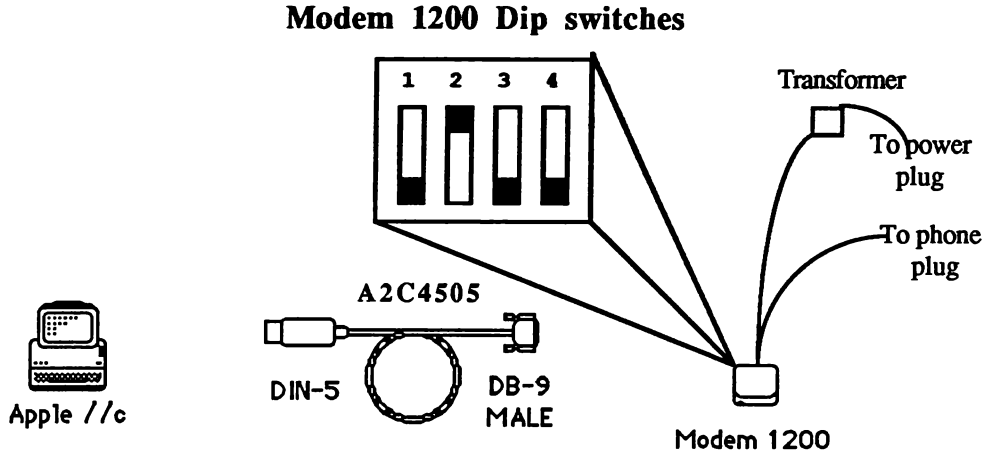




Education

Cables for Apple IIc equipment commonly used (and confused)

A diagram of the complete system needed to connect an Apple IIc to an Apple Modem 1200.



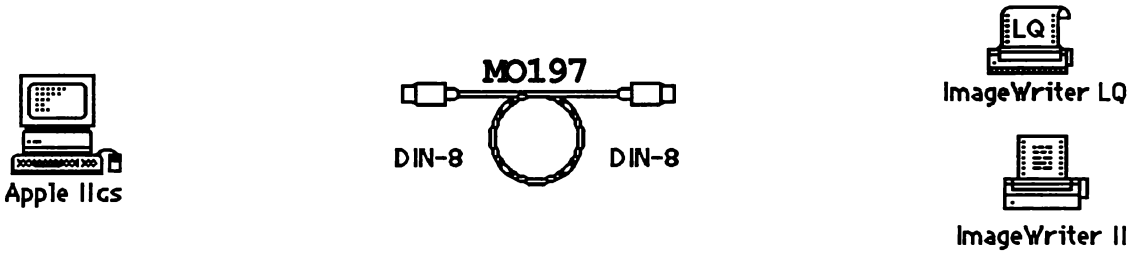
NB For Viatel select 1200/75 baud from your Videotex II options menu.

Education

Cables for Apple IIGS equipment commonly used.

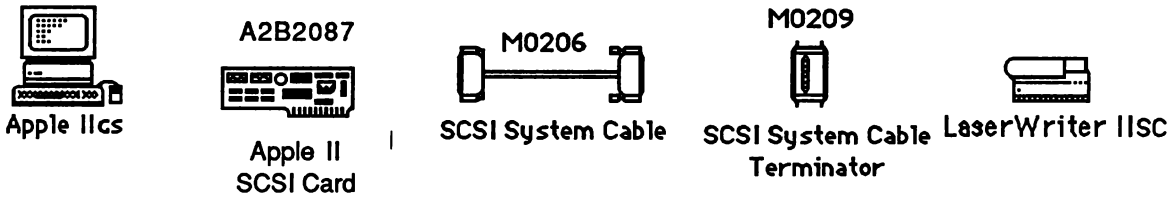
Platinum series

A diagram of the complete system needed to connect an Apple IIGS to an ImageWriter II and LQ printer.

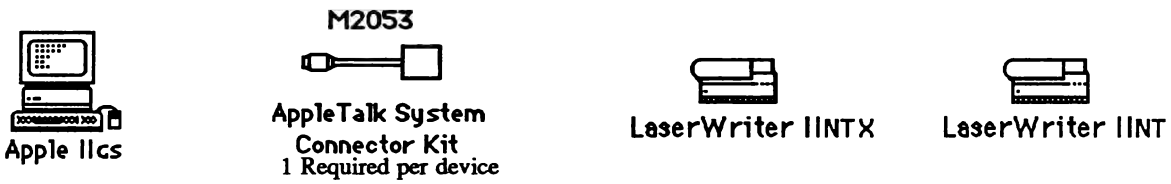


A diagram of the complete system needed to connect an Apple IIGS to an LaserWriter printer.

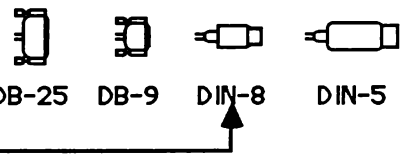
A diagram of the complete system needed to connect an Apple IIGS to an LaserWriter IISC printer.



A diagram of the complete system needed to connect an Apple IIGS to an LaserWriter IINT or IINTX printer.



This is the standard plug for serial connection for Macintosh Plus, SE, II and the Apple IIGS.



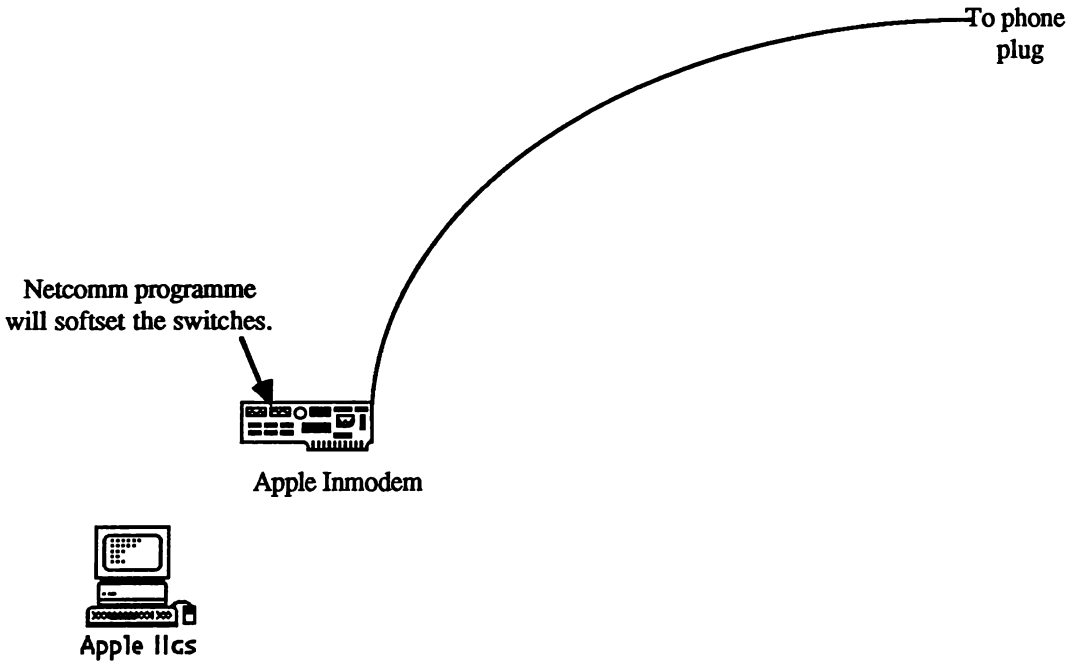
Education

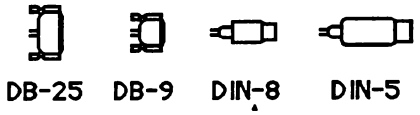
Cables for Apple IIGS equipment commonly used (and confused)

Platinum series

A diagram of the complete system needed to connect an Apple IIGS to an Apple InModem for 1200 or 300 baud usage.
(eg Telememo)

Simply install the card in slot two, software does the rest.



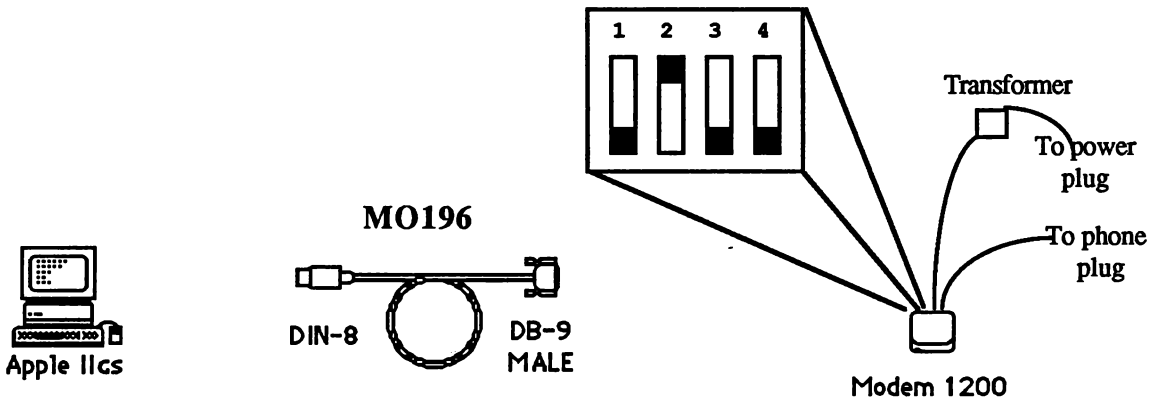


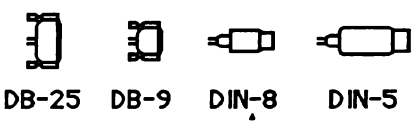
Education

Cables for Apple IIGS equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple IIGS to an Apple Modem 1200 for 1200 or 300 baud usage.
(eg Telememo)



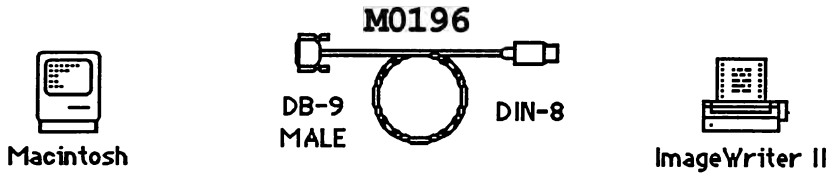


Education

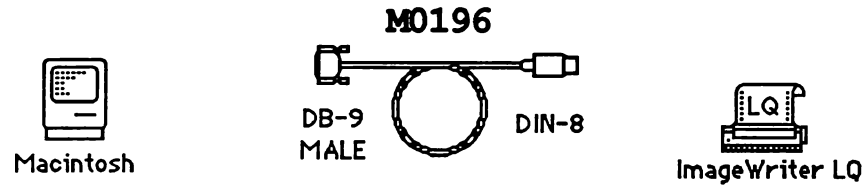
Cables for Apple Macintosh 512K and 512K/800 equipment commonly used.

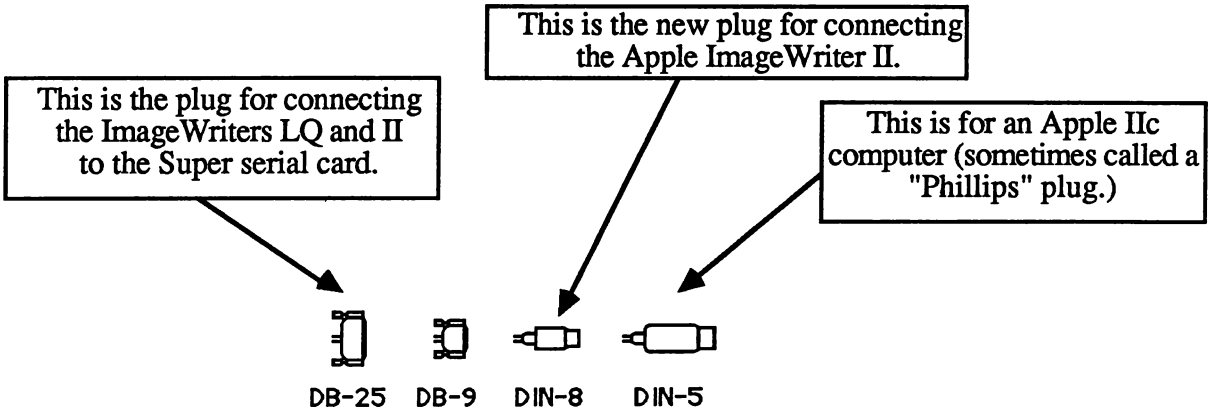
Platinum series

A diagram of the complete system needed to connect an Apple Macintosh 512K and 512K/800 to an ImageWriter II printer.



A diagram of the complete system needed to connect an Apple Macintosh 512K and 512K/800 to an ImageWriter LQ printer.



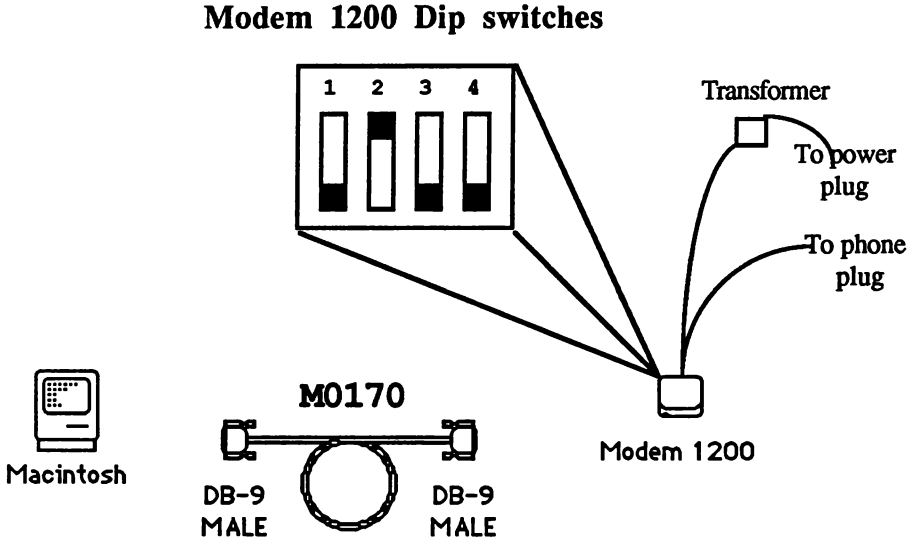


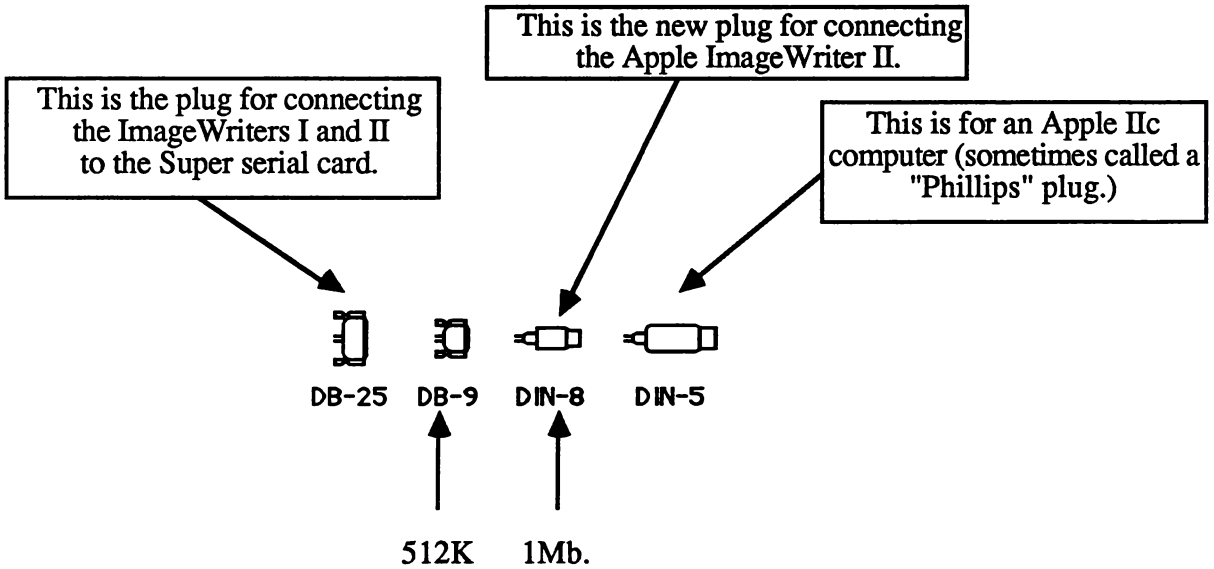
Education

Cables for Apple Macintosh 512K and 512K/800 equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple Macintosh 512K and 512K/800 to an Apple Modem 1200.





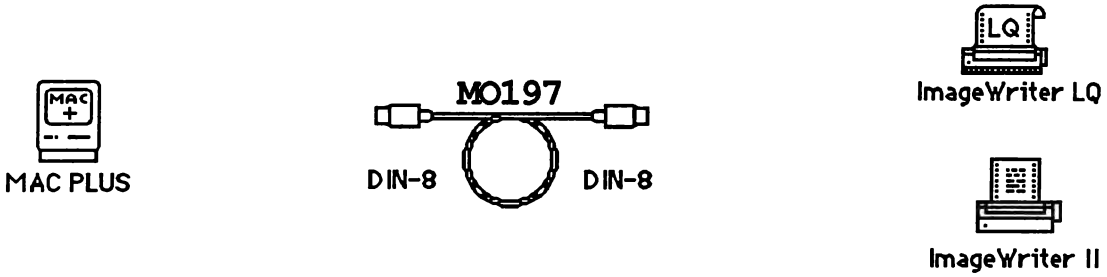
These two are used by the Macintosh series.

Education

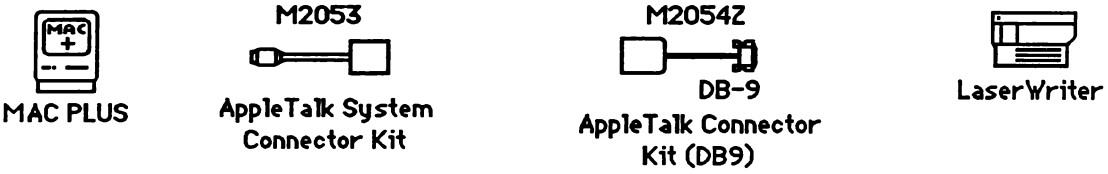
Cables for Apple Macintosh Plus equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple Macintosh Plus to an ImageWriter II and LQ printer.

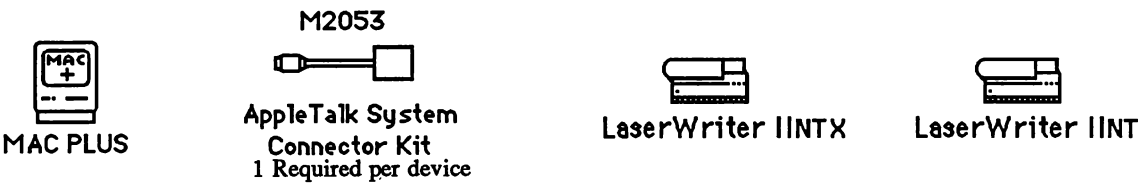


A diagram of the complete system needed to connect an Apple Macintosh Plus to an LaserWriter printer.



A diagram of the complete system needed to connect an Apple Macintosh Plus to an LaserWriter IISC printer.

A diagram of the complete system needed to connect an Apple Macintosh Plus to an LaserWriter IINT or IINTX printer.



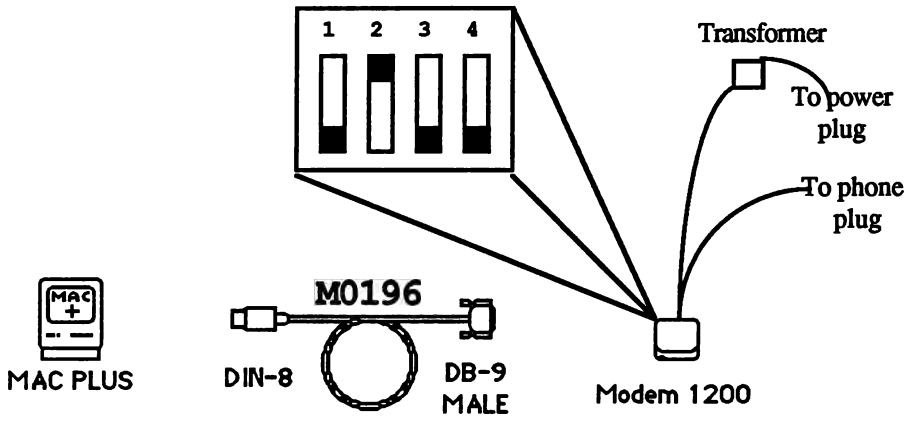
Education

Cables for Apple Macintosh Plus 1Mb equipment commonly used.

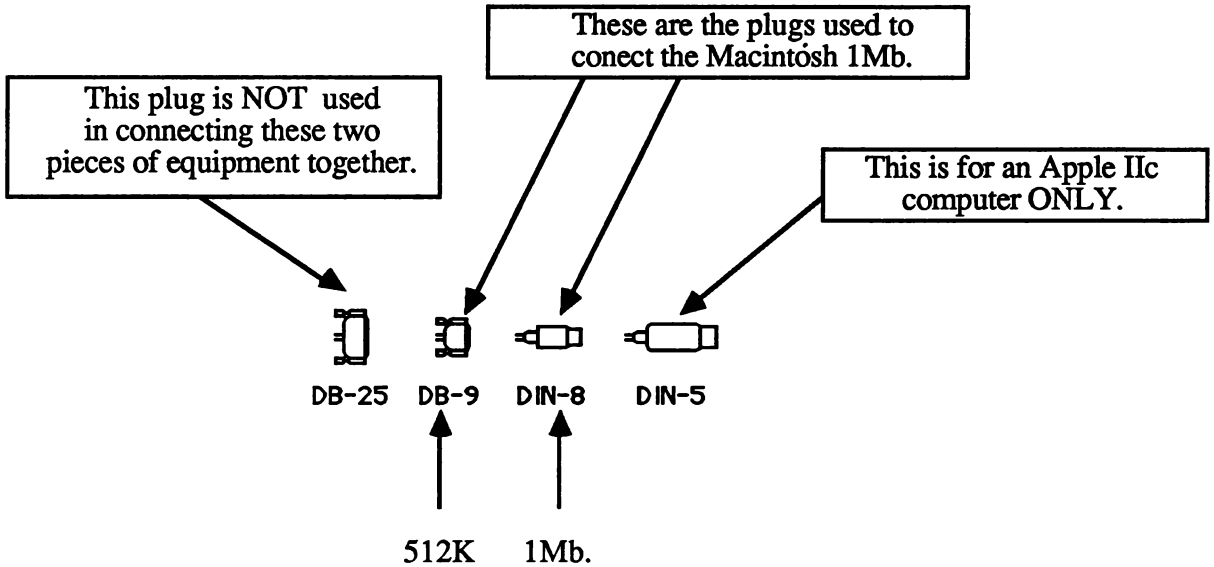
Platinum series

A diagram of the complete system needed to connect an Apple Macintosh Plus 1Mb to an Apple Modem 1200.

Modem 1200 Dip switches



MO189-BEIGE
MO199-PLAT. + M0170



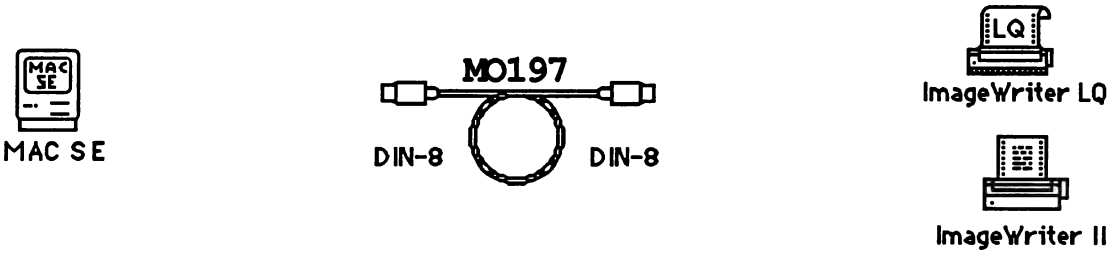
These two are used by the Macintosh series.

Education

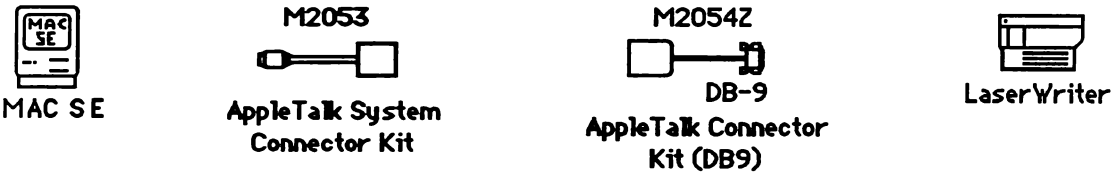
Cables for Apple Macintosh SE 1Mb equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple Macintosh SE 1Mb to an ImageWriter II and LQ printer.

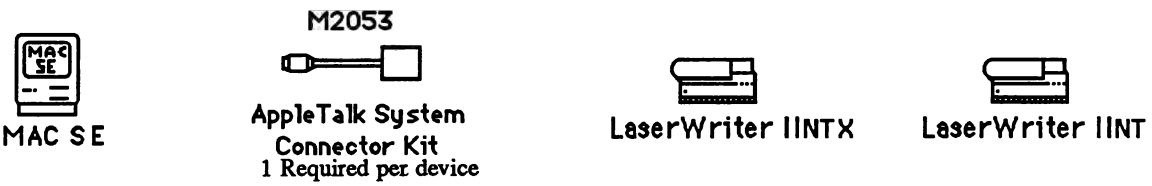


A diagram of the complete system needed to connect an Apple Macintosh SE 1Mb to an LaserWriter printer.



A diagram of the complete system needed to connect an Apple Macintosh SE 1Mb to an LaserWriter IISC printer.

A diagram of the complete system needed to connect an Apple Macintosh SE 1Mb to an LaserWriter IINT or IINTX printer.

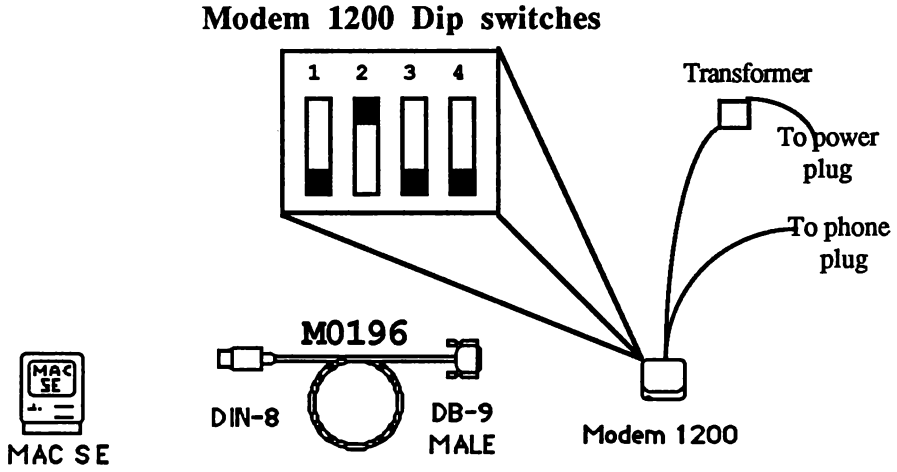


Education

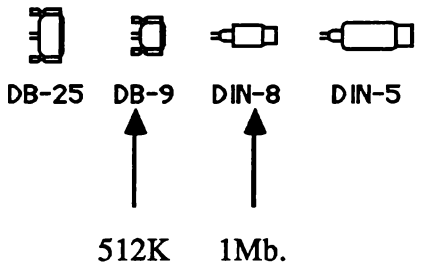
Cables for Apple Macintosh SE 1Mb equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple Macintosh SE 1Mb to an Apple Modem 1200.



MO189-BEIGE or MO199-PLAT. + M0170 Will also work.



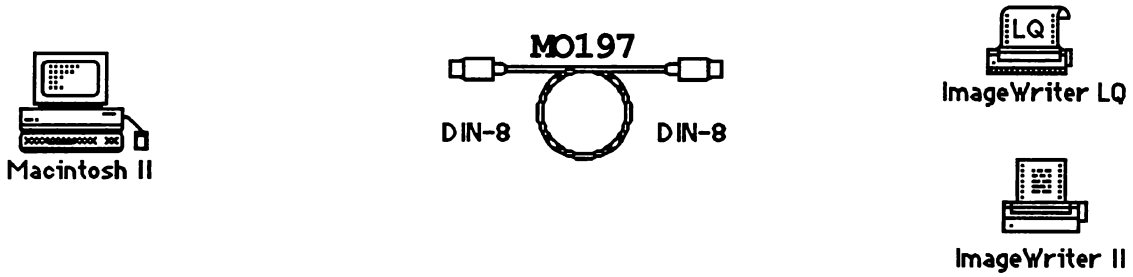
These two are used by the Macintosh series.

Education

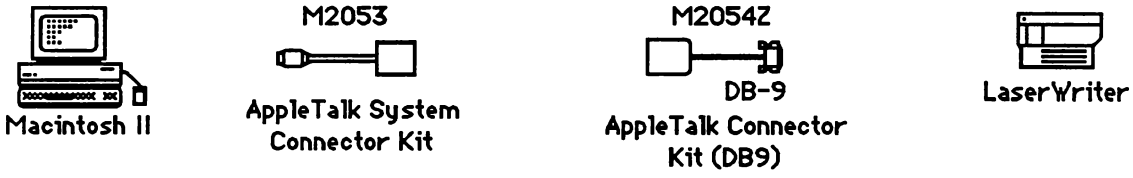
Cables for Apple Macintosh II equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple Macintosh II to an ImageWriter II and LQ printer.

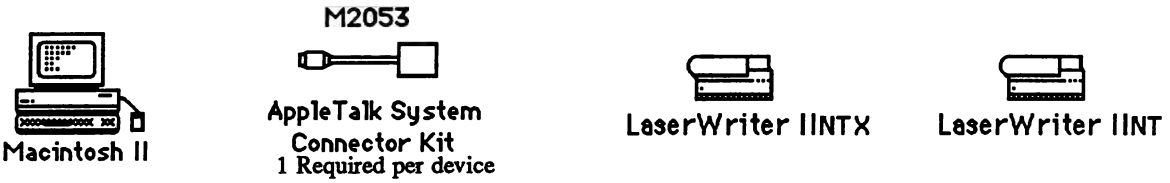


A diagram of the complete system needed to connect an Apple Macintosh II to an LaserWriter printer.



A diagram of the complete system needed to connect an Apple Macintosh II to an LaserWriter IISC printer.

A diagram of the complete system needed to connect an Apple Macintosh II to an LaserWriter IINT or IINTX printer.

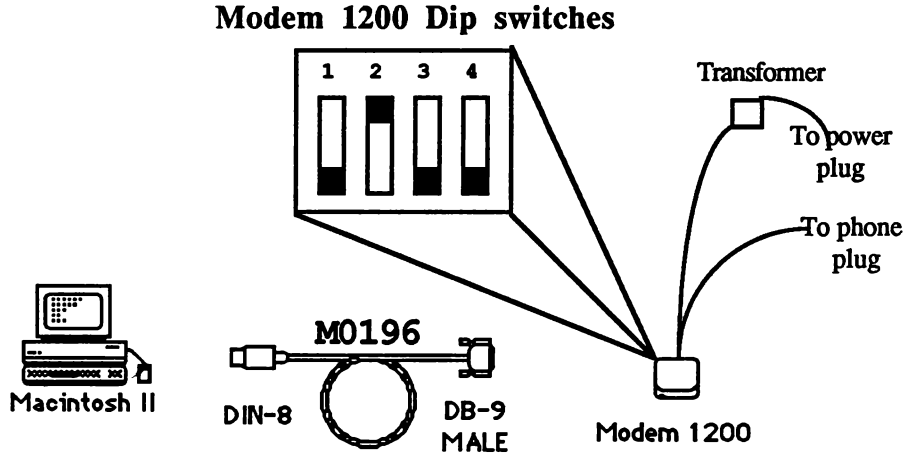


Education

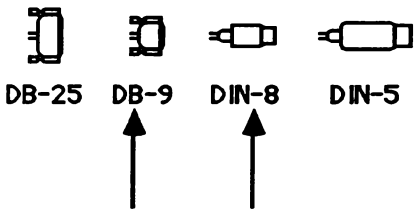
Cables for Apple Macintosh II equipment commonly used.

Platinum series

A diagram of the complete system needed to connect an Apple Macintosh II to an Apple Modem 1200.



MO189-BEIGE or
MO199-PLAT. + M0170
Will also work.



These two are used by the Macintosh series.

Education